

-

Contraction of the second

Source Contraction

Acade Presson Anna

ARRANAAN

And a and a second

and a second the second s

States and a state of a

A CONTRACTOR

and a data a dat

KICA

ACA -

ALARARACAS



,

τ.



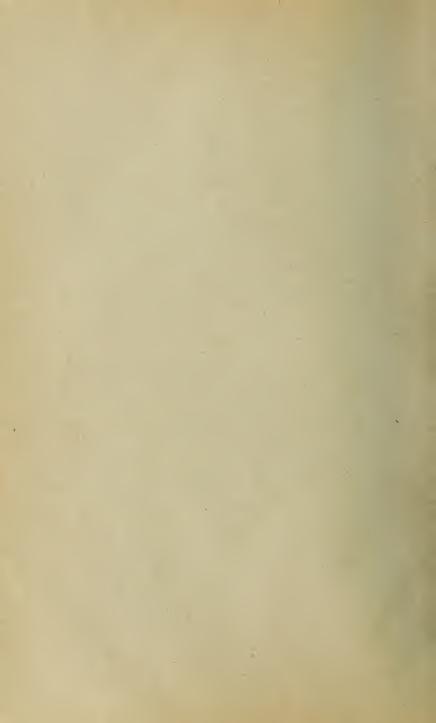
-

OUTLINES

OF

OLD TESTAMENT ARCHÆOLOGY

LANSING



OUTLINES

OF THE

Archæology of the Old Testament

PRINTED FOR THE USE OF THE STUDENTS OF THE THEOLOGICAL SEMINARY OF THE REFORMED (DUTCH) CHURCH IN AMERICA AT NEW BRUNSWICK, N. J.

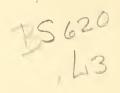
BY

Rev. J. G. LANSING, D. D.

Gardner A. Sage Professor of Old Testament Languages and Exegesis, and Author of An Arabic Manual, and Introduction Outlines of the Books of the Old Testament.

> NEW BRUNSWICK, N. J. J. HEIDINGSFELD, PRINTER, 42 ALBANY STREET 1896

62 - 9-1



COPYRIGHT BY J. G. LANSING 1896 Lawood, M. J.

1

OUTLINES

 \mathbf{OF}

OLD TESTAMENT ARCHÆOLOGY.

I.-Definitions.

1. The *Exegetical Theology* of the Old Testament includes everything relating to the exposition and elucidation of the Old Testament Scriptures. Hence it embraces Exegesis as an art, and all the branches of knowledge auxiliary to that art. In *Biblical Theology* we have presented the results of *Exegetical Theology*.

2. To Exegetical Theology belong

a. Biblical Philology. (See Introductory Statement in the Author's Introduction Outlines of the Books of the Old Testament.)

b. Biblical Archæology.

12136

c. Biblical Introduction, General and Special. (On Special Introduction see the Author's Introduction Outlines of the Books of the Old Testament.) d. Biblical Criticism, Textual and Literary or Higher.

e. Biblical Hermeneutics, including Hermeneutics proper and Exegesis.

3. a. Biblical Philology is a knowledge of the original languages of the Holy Scriptures. It is the science of the sacred words.

b. Biblical Archaeology is the science of sacred things as over against sacred words. It treats of Scriptural geography and ethnography.

c. Biblical Introduction is a knowledge of the rise and history of the Canon both as a whole and in its separate parts.

d. Biblical Criticism is a knowledge of the laws which determine the incorruptness or integrity of the text in its individual parts (= Textual Criticism), as also the laws in accordance with which we are to judge the canonicity, genuineness, and authenticity of an entire writing as a whole (= Literary or Higher Criticism).

e. Biblical Hermeneutics is a knowledge of the rules of interpretation or the laws of exposition. It treats of the principles in accordance with which the Holy Scriptures are to be interpreted. Exegesis is the actualizing of Hermeneutics, the art of which Hermeneutics is the science. The one gives the theory, the other reduces it to practice. In Exegesis we have the exposition and explanation of the Holy Scriptures.

4. The Biblical Archæology of the Old Testament is a knowledge of the sacred *things* of the Old Testament, as over against its sacred *words*.

As the grammar and lexicon are necessary to the understanding of the words of the Bible, so to a thorough understanding of the things of the Bible, a knowledge of the historical, physical, geographical, statistical, economical, political and social relations and circumstances under which the Bible was produced, is necessary.

Moreover, a knowledge of the antiquities of other nations is necessary, so far as these have any direct bearing upon any passage of Scripture:—that is, the antiquities of those nations that came in contact with the Hebrews, either on account of race relationship, such as the Arabians, Aramæans, Canaanites, Philistines, etc., or through some political combination, such as the Egyptians, Assyrians, Chaldæans, Persians, Greeks and Romans.

II.-Sources of Biblical Archæology.

The sources of the science of Biblical Archæology comprise

1. Ancient monuments and buildings, plastic representations, inscriptions and coins, the ruins of such cities as Baalbee, Palmyra, Nineveh, Petra, Zoan-Tanis, etc., and the ancient temples and palaces of Egypt, Assyria, Babylonia, Phœnicia, Persia and Syria with their plastic and pictorial representations.

2. Written sources: as

a. The Canonical Scriptures of the Old and New Testaments.

b. The Apocryphal books of the Old Testament, especially the books of the Maccabees.

c. The writings of Philo of Alexandria (died about A. D. 40), and of Josephus, a Jewish priest, born A. D. 37 at Jerusalem, died at Rome after 103, and whose especially valuable works are his *Antiquities of the Jews*, and his *History of the Jewish War*.

d. The Targums or Chaldee paraphrases.

e. The Talmud (= Teaching, Doctrine) treating of Jewish theology and jurisprudence, and consisting of two parts, the *Mishna* (= Repetition, the Second Law) and the *Gemara* (= Supplement, Conclusion, *i. e.*, of rabbinical wisdom). The Mishna is a digest of rabbinical traditions concerning the Mosaic law, and was reduced to writing in its present form by R. Jehudah the Holy, Patriarch of Tiberias at the close of the second or early part of the third century. The Gemara is a commentary on the text of the Mishna. There are two Gemaras, the Palestinian (compiled about A. D. 390), and the Babylonian (A. D. 500). The Mishna is more important than the Gemara for Biblical Archaeology.

f. Ancient Greek and Latin writers as Xenophon, Polybius, Diodorus Siculus, Strabo, Plutarch, Pliny, Tacitus, and especially Herodotus.

g. Oriental writers as the Arabic geographers and natural philosophers, the religious books of the Arabs and Parsees (Kuran and Zend-Avesta), and such writers as Jerome and Ephræm the Syrian.

h. Modern scientific works of exploration, research, travel, etc.

III.-Material of Biblical Archæology.

As to its material, the Biblical Archeology of the Old Testament treats of the *Geography* and *Ethnography* of the Old Testament Scriptures and the Jews. The terms are used in their broad sense; thus under Ethnography is included also the literature, science and arts cultivated by the Jews, as well as antiquities.

OLD TESTAMENT GEOGRAPHY.

IV.-Parts and Definitions.

The Biblical Geography of the Old Testament is threefold:—Political, Physical and Topographical.

1. The Political Geography of the Old Testament describes the countries of the Old Testament as divided and occupied by various nations, and improved by human art and industry.

2. The Physical Geography of the Old Testament describes the actual state of the surface of these Old Testament countries in respect to the three great divisions—land, sea and air, together with the natural history (*Physica Sacra*) of these divisions.

3. The Topographical Geography of the Old Testament describes a particular place, city or town in any one of these Old Testament countries at different periods.

POLITICAL GEOGRAPHY OF PALESTINE.

V.-Definition.

The term Palestine is here employed as denoting the whole land allotted to the twelve tribes of Israel by Joshua.

OLD TESTAMENT ARCHÆOLOGY.

VI.-Names.

The land of Palestine is variously called

1. Philistia, Palæstina whence Palestine. Joel 3: 4 (4:4).

2. Canaan. Gen. 9:18; 10:15-19.

3. The Land of Promise. Gen. 13:15.

4. The Land of Jehovah. Hos. 9:3.

5. The Land of Israel. 1 Sam. 13:19.

6. The Land. Ruth 1:1; Jer. 12:11.

7. The Land of Judah, *i. e.* Judæa. Isa. 26:1.

8. The Holy Land. Zech. 2:12 (2:16).

VII.-Boundaries.

That is, the geographical situation and dimensions of the land at different periods. For the fuller treatment of this subject see the two following sections.

1. Geographical Position. Palestine is central yet isolated. It stood midway between the three greatest nations of antiquity, viz. Egypt, Assyria and Greece; and yet it was isolated from these by having the desert of Shur on the south, the north Arabian desert extending to the Euphrates on the east, and the Mediterranean Sea on the west. Syria lay to the north, but even here the lofty chains of Lebanon and Hermon served in part to complete the isolation.

2. Natural Boundaries and Dimensions.

a. Of the Land as promised to Abraham. Gen. 12:7; 13:14, 15; 15:18; Ex. 23:31. That is, the country promised to the patriarch extended from the banks of the Nile to the Euphrates. This territory was given on conditions, but as the people did not fulfil the conditions the whole land promised was not given. b. Of the Land as described by Moses. Num. 34: 1-12. It was more limited in extent than that promised to Abraham. The boundaries are defined with great precision in the passage cited Num. 34:1-12.

c. Of the Land as allotted by Moses and Joshua to the twelve tribes. The boundaries of the land on the east of the Jordan are given in Num. Ch. 32 and Josh. 13:8-32, and on the west of the Jordan in Josh. Chs. 15-19. The north border was Zidon on the coast, and the south was identical with that of b above.

d. Of the Land in the prophetic vision of Ezekiel. Ezek. 47:13–23. It was conterminous on the southwest and north with that of Moses. But it also included the kingdom of Damascus besides the possessions of Reuben, Gad and half Manasseh.

3. Politico-Historical Boundaries and Dimensions.

a. Before the conquest of the land by the Israelites. The natural boundaries described in 1, this §; Canaan comprising the land west of the Jordan, Bashan and Gilead east of Jordan.

b. After the conquest of the land and as distributed to the twelve tribes. See § 9, 3.

c. During the Monarchy. 1093-586 B. C. Under Solomon the political boundaries touched the Euphrates on the east and the Syrian Hamath on the north. See § 8, 3.

d. Under the Maccabees. 100 B. C. See § 8, 4.

e. Under Herod the Great. 40 B. C.

In the time of our Lord, under Agrippa I., and at the Destruction of Jerusalem, the boundaries and dimensions of the Land were nearly identical with its boundaries and dimensions under Herod the Great.

VIII.—Divisions (Territorial).

Territorial divisions adjacent to but not included in Palestine proper are also referred to in this section.

1. Palestine before the Conquest.

As territorial divisions went largely by the names of the inhabitants occupying them there must be taken especially in connection with this part of this section those parts of the section following that refer to the primitive and patriarchal inhabitants of Palestine. This is especially true of Canaan or that great part of Palestine proper lying west of the Jordan. This part of this section refers to certain territorial divisions mentioned in the Old Testament and lying both in and adjacent to Palestine. For those not mentioned here see next §, and § 12, 1, 2, 3.

a. Ammon. Deut. Ch. 2. East of Moab. Moab see below.

b. Arabah. Deut. 1:1. The great desert valley west of Mt. Seir (see below) and extending from the Dead Sea south to the Gulf of Akabah. Indeed it may be said to extend from Mt. Hermon to this point, so taking in the Jordan Valley.

c. Argob. Deut. 4:4, 13. A province of Bashan. See next.

d. Bashan. Gen. 14:5. The large district east of the Jordan and over against the northern part of Palestine. Limits:—border of Gilead on the south to Mt. Hermon on the north, and from the Jordan Valley on the west to Salcah on the east. The territory was formerly occupied by the Rephaim and afterwards by the half tribe of Manasseh. The chief cities were Ashtaroth, Beeshterah, Edrei, Golan, Salcah and possibly Mahanaim. Golan and Salcah were afterwards allotted to the Levites, Golan being also a City of Refuge. See Topographical Geography.

e. Canaan. Gen. 13:12. The territory lying between the Mediterranean on the west and the Jordan and Dead Sea on the east, and occupied by several Canaanitish tribes. See § 9. According to Gen. ch. 10, Canaan extended as far north as Hamath and Arvad.

f. Ciccar. Gen. 13:10 The Jordan Valley from Jericho and the northern extremity of the Dead Sea to Succoth, north. Cities:—Sodom, Gomorrah, Zeboim, Admah, and Bela afterwards called Zoar. See § 18.

g. Edom. Num. 24:18. Extends from the southeastern border of Palestine, east to the borders of Moab, and south including what was properly called the land or mountain of Seir.

h. Gilead. Gen. 31:21; Deut. 3:12-17. The mountainous district east of the Jordan, bounded on the north by Bashan, on the east by the Arabian plateau, and south by Moab and Ammon. Afterwards comprised the territory of Reuben, Gad, and extreme southern portion of Manasseh. The aborigines were the Zuzim. See § 9.

i. Midian. Ex. 2:15. Extends from the Sinaitic desert to the far east and north.

j. Mishor. Deut. 3:10; 4:43. The plateau of Moab bordering Gilead on the south and east, and in which was Bezer, a City of Refuge.

k. Moab. Gen. Ch. 19. The territory lying east of the southern portion of the Jordan and the Dead Sea, and having Gilead on the north. Composed of "the field of Moab," Ruth Ch. 1, "the land of Moab," Deut. Ch. 1, and the "plains" or deserts "of Moab" opposite Jericho.

l. Negeb, *i. e.* the South Country. Gen. 13:1. The district south of Hebron.

m. Seir. Gen. 14:6. The mountainous ridge or tract, east of the valley of the Arabah (see above), and extending south from the Dead Sea to the Gulf of Akabah. Territory formerly occupied by the Horites. See § 9.

n. Shephelah. Deut. 1:7. The low hill districts afterwards comprised in Judea and Samaria.

o. Vale of Siddim. Gen. 14:3. About same as Ciccar. See above.

p. Tob. Judg. 11:3, 5. A Syrian district northeast of Gilead.

q. Uz. Job 1:1. Territory adjacent to Edom.

r. Wilderness of Shur. Gen. 16:7. The desert extending between Palestine and Egypt and bordering on the Mediterranean.

NOTE.—For other territorial divisions not mentioned here see \S 9, and \S 12, 1, 2, 3.

2. Palestine after the Conquest and as divided to the twelve tribes.

Beginning east of the Jordan the territory formerly occupied by the two kingdoms of Og, king of Bashan, and Sihon, king of the Amorites, was divided between the two and a half tribes.

a. Reuben occupied the southern half of the kingdom of Sihon, *i. e.* the plateau of the Mishor (this \S , 1, j). Reuben's boundaries were, on the south the river

12

Arnon; west, the Dead Sea; north, territory of Gad; east, Ammon.

b. Gad occupied the territory extending from Reuben on the south to Mahanaim and Ramath-Mizpeh cities on the Manasseh boundary to the north. He had the Jordan Valley east of the river and the territory of Mt. Gilead lying half of it north and half of it south the river Jabbok. Formerly it comprised the northern half of the kingdom of Sihon and the southern portion of the kingdom of Og.

c. Manasseh, the transjordanic half of the tribe, occupied the broad plains of Bashan to the north (this §, 1, d). This territory of Manasseh was nearly double that of Gad or Judah, but a great portion of it was desert.

Passing to the west of the Jordan

d. Simeon occupied the southern extremity of Palestine and territory given up by Judah. It stretched across Palestine from the Dead Sea and south of the Dead Sea (wilderness of Zin) on the east to the Philistine plain and the Mediterranean on the west. The southern border was the desert, and the northern boundary line was marked by certain towns on the southern border of and belonging to Judah, viz. Anab, Jattir, Zanoah, Eglon, etc. Josh. Ch. 15.

e. Judah possessed the largest share of the territory west of the Jordan, as, including the territory it afterwards gave up to Simeon, it embraced the five districts of the Arabah or Jordan Valley, the Har or mountain, the Shephelah, the Negeb, the Midbar (see this \S , 1), south to and beyond Kadesh Barnea and Hezron, afterwards the southern boundary of Simeon. Judah had the Dead Sea and the Jordan on the east, and the plain of Philistia and the Mediterranean on the west. On the north of Judah were the territories of Benjamin and Dan. The boundary line between Judah on the south and Benjamin and Dan on the north is marked by the following places beginning east and going west: viz. the mouth of the Jordan; the Valley of Achor, leaving Gilgal to the north; to the "going up of Adummim"; beside the Valley of Ben Hinnom south of Jebus (Jerusalem); to Bethlehem (formerly called Ephrath or Ephratah) in Judah; to the Waters of Nephtoah; to Kirjath Jearim and Beth Shemesh; to Timnah south of the Valley of Sorek; to Ekron; to Gezer; west to the stream which falls into the Mediterranean near Jabneel (Yebnah). Josh. Ch. 15.

f. Benjamin lay north of the eastern half of Judah, the southern border of Benjamin coinciding with the northern border of Judah lying between Kirjath Jearim east to the Jordan. The eastern boundary being the Jordan, the northern boundary line, separating it from Ephraim, passed from the Jordan to the "shoulder of Jericho on the north"; then to the desert northeast of Bethel; southward to Bethel (formerly Luz); still south to Archi; then west to Ataroth Adar. A line drawn from Ataroth Adar, south to Kirjath Jearim, marked the western boundary separating it from the southern portion of the territory of Dan. Josh. Ch. 18.

g. Dan. The territory of Dan was carved out of the country of Ephraim. The original border of Ephraim marched with that of Benjamin to the sea. But the Shephelah below Bethhoron, and the Sharon plain near Jaffa were given to Dan. The west boundary was the sea or Philistine plain; the northeast boundary was Ephraim; the south and southeast

14

boundaries were those described for Benjamin (east) and Judah (south). The north boundary of Dan is given in Josh. 19:46.

h. Ephraim had Dan on the west and Benjamin on the south, as described above. The northern boundary was the Brook Kanah, and Shechem (in the territory of Manasseh). The eastern boundary approached but did not include the Valley of the Jordan (also in the territory of Manasseh). Josh. Ch. 17.

i. Manasseh. The greatest limits of the large territory of Manasseh were on the east and west. On the east it extended along the Jordan Valley from the plains of Jericho on the south to near the valley of Jezreel on the north; on the west it extended from the Brook Kanah on the south to Mt. Carmel in the north. Its central portion was the narrowest, extending from Shechem on the south to a point south of Ibleam in the north. West of Ibleam the boundary line ran north to Mt. Carmel, leaving Issachar and the southern portion of Zebulon on the east. Josh. Ch. 17.

j. Issachar possessed the great central plateau, with Manasseh on the south and west, and Zebulon and Naphtali on the north. On the east the boundary extended to Jordan.

k. Zebulon had Issachar on the south and the most northern section of Manasseh on the southwest. To the north lay the territory of Asher and a part of the territory of Naphtali. To the west lay the sea. On the east Zebulon did not reach to the Jordan and the Sea of Galilee, as between it and the Sea of Galilee is a broad plateau in which many towns belonging to Naphtali are now identified. Josh. Chs. 19 and 21.

1. Asher extended northward from Zebulon along

the sea, with Naphtali on the east. The border between Asher and Naphtali is defined by the cities existing along it (Josh. 19:25). While Naphtali held the higher mountains eastward, Asher held the plain, and the lower olive-bearing hills westward. Josh. Ch. 19.

m. Naphtali. The western border of Naphtali was Asher following the border towns given in Josh. 19:25. On the south were Zebulon and Issachar. On the east Naphtali had the Jordan, the Sea of Galilee, the Waters of Merom, to the northernmost point of the Land. Josh. Ch. 19.

3. Palestine under the Judges and the Monarchy.

After the death of Joshua and during the period of the Judges the history of the Land is one of constant fluctuations in the fortunes of Israel, of the loss and recovery of territory. A number of districts and many cities remained in the possession of the former inhabitants. The Canaanites who were not exterminated by Joshua held their own after his death. The Philistines still possessed the maritime plain of the southwest. The Jebusites continued to hold part of Jerusalem. A good part of the territory of Dan was still held by the Amorite mountaineers. And many cities in different parts of the country were still not captured by the Israelites. During the period of the Judges a slight change takes place in the geography of Israelitish possessions east of the Jordan. That is, they were gradually extended, the prohibition to annex the land of Ammon and Moab (Deut. 2:9, 37) being disregarded. From this time the Ammonites, like the Canaanites, are reckoned as enemies of Israel.

The sword of David carved out the kingdom inher-

ited by Solomon. With the consolidation of the Jewish Kingdom under Solomon we find changes in the general geography of the Land. The Philistines had been driven back to their plains, retaining, however, the strongholds of Gath and Gezer. Rabbah, the capital of the Ammonites, had been taken. The Jebusites had been entirely dispossessed of Jerusalem. The census embraced all the Holy Land, from Beersheba to Sidon, ruled by the King at Jerusalem. In the time of Solomon Gezer was taken by the Egyptians and then given as the dower of his Egyptian wife (1 Ki. 9:16). The Syrian Hamath in the far north was conquered (2 Chron. 8:3, 4). The whole country west of the river Euphrates from Hamath in the far north and as far as Gaza on the south was reckoned as being subject to Solomon (1 Ki. 4:24; 2 Chron. 9:26). The land of the Philistines is not, however, included, and the Canaanites were not exterminated, but reduced to pay tribute (2 Chron. 8:7).

The dominions of Solomon were divided into twelve provinces, each with an officer appointed over it. These twelve provinces corresponded roughly to the tribes of Israel, without counting Simeon, and treating the two halves of Manasseh as separate tribes. The provinces are as follows:

First province, Mount Ephraim (1 Ki. 4:7).

Second province, corresponds to the territory of Dan. Third province, was coextensive with the land of Judah.

Fourth province, corresponds to the land of Manasseh.

Fifth province, was equivalent to the territory of Issachar.

[2]

Sixth province, corresponds to Manasseh beyond Jordan.

Seventh province, corresponds to the territory of Gad. Eighth province, was Naphtali.

Ninth province, was Asher.

Tenth province, territory of Zebulon and northern part of Issachar.

Eleventh province, was Benjamin.

Twelfth province, corresponds to the territory of Reuben.

The name of Simeon does not occur in this connection, nor is the territory of Simeon made into a separate province. In 1 Chron. 4:31 we find that the cities of Simeon mentioned as belonging to that tribe " unto the reign of David," while, at a later period, and in 1 Ki. 19:3 and Neh. 11:25, they are enumerated as belonging to Judah. The "strangers" of Simeon are noticed as assisting King Asa (2 Chron. 15:9). In short the prophecy of Jacob seems thus to have been fulfilled in the case of Simeon: "I will divide them in Jacob, and scatter them in Israel." Gen. 48:7.

With the accession of Rehoboam came the division of the Kingdom into the southern Kingdom of Judah, composed of the tribes of Judah and Benjamin, and the northern Kingdom of Israel, composed of the remaining tribes. The geographical boundaries were also slightly changed. The northern boundary of the Kingdom of Judah ran from the Jordan Valley westward along the strong valley of Michmash, dividing the land of Benjamin in two, and so westward to the Philistine plain on the sea, having Aijalon on its northwest border. The full extent of the land of Benjamin was apparently only held by Abijah, Rehoboam's

18

successor, when Bethel, Jeshanah and Ephraim were taken from Jeroboam (2 Chron. 13:19).

The later history of the kingdom is one of continual loss of territory. The country east of the Jordan was overrun by the Moabites and Ammonites. The southern port of Ezion-geber remained in the hands of the Jews as late as the time of Uzziah (808 B. C.), but in the time of Ahaz (740 B. C.), the town appears to have been lost (2 Ki. 16:6), being taken by the Syrians. The seaport of Joppa was also probably lost as the Philistine advances not only extended over the Maritime Plain and the Negeb, but overran the Shephelah. On the south the Edomites encroached on the Kingdom of Judah, until finally the extent of country ruled by Ahaz of Judah did not probably exceed 300 square miles, as over against the 30,000 square miles of Solomon's dominions.

After the Captivity the territory reoccupied by the Jews under Nehemiah is indicated by the names of its various towns (Ezra 2:21-35; Neh. 7:24-38; Neh. 11: 25-35). None of the places there mentioned were north of the old boundary at Bethel, but many cities of Dan and Simeon were included. The children of Judah repeopled the land from Jerusalem to Beersheba and from Jericho to Lachish. The Benjaminites reoccupied the whole of their old tribe territory and a portion belonging to Dan. The country repopulated had an area of about 2,000 square miles, or a district about equal to the whole Kingdom of Judah at its most prosperous period. Philistia remained as ever unconquered. The Idumæans or Edomites seem to have been driven back to their deserts. Finally, in the time of Nehemiah, the Arabs are for the first time

enumerated among the enemies of the Jews, with the Ammonites, Samaritans, and Philistines of Ashdod (Neh. 4:7).

4. Palestine during the Asmonæan Period.

Asmonæan or Hasmonean is the proper designation of the family of the priest Mattathias, whose sons became better known by the surname of the Maccabees.

Palestine having passed from the control of the Persians to the Greek Monarchy was ruled under the Seleucidæ by governors appointed by the King at Antioch. With Mattathias (167 B C.) began the exploits of the Maccabees in delivering the Jewish people from the oppressive yoke of the Syrian Seleucidæ, which was accomplished by Jonathan, son of The territory thus recovered and made Mattathias. free by the Maccabees was substantially that recognized in the Herodian period as forming the limits of the Holy Land. The integrity of the kingdom was, however, materially affected by the existence of a heretical and ungovernable central province; and the Jewish hatred of Samaritans, which caused them in the time of Christ to avoid even the mention of Samaria, had no doubt arisen before Maccabæan times, and had been fostered by the assistance given on various occasions to the Greeks by the Samaritans.

IX.-Inhabitants and Politico-Historical Divisions.

1. Primitive inhabitants and territory occupied by them. These aborigines are for the most represented as being giants. They were conquered and dispossessed by the Canaanitish tribes enumerated under 2 immediately following. These giant nations were

a. Anakim. Num. 13:33, 34; Josh 11:21, 22. In-

habited southern and western Palestine, particularly the vicinity of Hebron.

b. Avim. Josh 13:3. The aborigines of southwestern Palestine driven out by the Philistines.

c. Emim. Gen. 14:5; Deut. 2:10, 11. Occupied the plateau of Moab. The Emim were related to the Anakim, and were generally called by the same name, but their conquerers, the Moabites, termed them Emim.

d. Giborim. Mentioned in connection with the Nephilim (see below) in Gen. 6:4.

e. Horim. Deut. 2:11. Dwelt in eastern and southern Edom, in Petra, and perhaps in southern Palestine. They were dispossessed by the children of Esau and Ishmael.

f. Nephilim. Mentioned only in Gen. 6:4 and Num. 13:33. By some the Nephilim are identified with the Rephaim (see below), but the former seem to belong to an earlier period, and are not necessarily connected with the latter.

g. Rephaim. Gen. 14:5; 15:20, etc. They dwelt in Bashan and to the south of Damascus, and beside Jerusalem. The Rephaim were succeeded by the Amorites.

h. Zamzummim. Deut. 2:20. This was the Ammonitish name for the Rephaim (see just above).

i. Zuzim. Inhabited the territory or part of the territory afterward Gilead.

2. Inhabitants during the patriarchal period and territory possessed by them. The gigantic races of the aborigines gradually disappeared before the tribes of the Canaanites. These Canaanite tribes and a few adjacent tribes are as follows: a. Amalekites. Gen. 14:7; 36:12,16. They extended from the Red Sea across the Wilderness of the Wanderings to southern Judah.

b. Anmonites. Deut. 2:37. East of the Jordan.
c. Amorites, or "mountaineers." Gen 10:16; Ex.
3:8; 13:5, etc. They dwelt both east and west of the Jordan, and from the north to the south of Palestine.

d. Arkites. Gen. 10:17. Near Acre, in Lebanon, north of Tripoli.

e. Arvadites. Gen. 10:18. Dwelt near Aradus, an island on the coast, some thirty miles north of Tripoli.

f. Canaanites, or "lowlanders." Gen. 10:19; Josh. 11:3. Occupied the Maritime Plain from Gaza to Sidon, and in the Jordan Valley they stretched from Sodom to Lasha.

g. Edomites. Gen. 36:19. Inhabited Mt. Seir and the neighborhood of Petra, as far south as the shores of the Gulf of Akabah.

h. Girgashites. Gen 10:16; Deut. 7:1. Probably occupied the territory southwest of the Sea of Galilee.

i. Hamathites. Gen. 10:18. Dwellers of Hamath in the north.

j. Hittites. Gen. Ch. 23 and 27:46; Num. 13:29; Josh. 1:4. They dwelt in the north, coming originally from the ranges of the Taurus mountains, and extended eastward to the Euphrates. They were also in the south occupying the mountains of Ephraim, and reached as far south as Beersheba.

k. Hivites, or "midlanders." Gen. 34:2; Josh. 9:17. Inhabited a portion of central Palestine and the hill country north of Jerusalem. The term is also applied to inhabitants of Lebanon. *l. Jebusites.* Gen. 10:16; Ex. 3:8,17; Deut. 7:1, etc. Occupied Jerusalem and the surrounding mountains. Were in possession of part of Jerusalem in David's time.

m. Kadmonites. Gen. 15:19. Occupied the central Syrian desert midway between the Jordan and the Euphrates.

n. Kenites. Gen. 15:19; Num. 24:21. Dwelt in southern Judah and near the Amalekites.

o. Kenizziles. Gen. 15:19. This tribe is known only by name.

p. Midianites. Gen. 25:4. Lived in the Sinaitic desert, and their land extended eastwards to an unknown limit.

q. Moabiles. Gen 19:37. East of the Jordan and the Dead Sea, and later south of the river Arnon.

r. Perizziles, or "rustics." Gen. 34:30: Josh. 17:15. Occupied the centre of Palestine and Lower Galilee.

s. Philistines. Gen. 10:14; Deut. 2:23, etc. Exterminating the Avim the Philistines occupied the southwest of Palestine. They were of Egyptian origin, and were never completely conquered by the Israelites.

t. Sinites. Gen. 10:17. South of the Arkites. (See above.)

u. Zemarites. Gen. 10:18. A place inland of the district occupied by the Arvadites. (See above.)

3. Inhabitants after the Conquest and during the Monarchy, i. e. the Israelites; with whom however still lived a Canaanite population. The tribes of Israel inhabited the territories allotted them as see preceding section. The following table shows the pop-

ulation of these tribal territories based upon the census furnished in Num. Ch. 26. This census counts only male adult population. With the census is given the area of the tribal territories in square miles.

а.	Reuben.	Pop.	adult	males,	43,730.	Sq. miles,	700
b.	Gad.	"	"	" "	40,500.	<u>،</u> د ،	1,300
с.	Manasseh	$\frac{1}{2}$ "	" "	"	29,280.	" "	2,500
d.	Simeon.		"	66	22,200.	"	1,000
e.	Judah.	"	"	"	75,500.	" "	1,400
f.	Dan.	"	"	"	64,400.	66	500
g.	Benjamin.	"	"	"	45,600.	" "	300
h.	Ephraim.	"	"	66	32,500.	"	600
i.	Manasseh	1 ''	"	د د	23,420.	"	800
<i>j</i> .	Issachar.	"	676	66	64,300.	" "	400
\dot{k} .	Zebulon.	"	"	"	60,500.	"	300
l.	Asher.	"	"	د د	53,400.	"	300
m	Naphtali.	"	"	"	45,400.	" "	800
	Total,				601,730]	10,900

In the territory of Judah, Philistia has not been included (1,000 sq. miles), nor the Jeshimon Desert (400 sq. miles), giving 2,800 sq. miles as the real total of the territory for Judah.

Multiplying the total adult male population by four we get the approximate number of souls 2,406,920. At the accession of Solomon the population of Jewish origin numbered 1,300,000 fighting men (2 Sam. 24:9), which represents a total of 5,000,000 souls, or double the population of the time of the Conquest. The present population of the same extent of country is supposed not to exceed 700,000 souls.

4. Inhabitants at the time of and after the Captivity.

With the invasion of the Kingdom of Israel by

Assyria, the subjection of King Hoshea by Shalmaneser, and the capitulation of Samaria to Sargon, the people of the Northern Kingdom were carried away captive. Foreign colonists were placed in their room; and these, adopting the Jewish law and conforming to some extent to the Jewish ritual were founders of the nation and sect of the Samaritans. A great part of Palestine, nearly the whole of the Kingdom of Israel, now became a province of the Assyrian empire, and afterwards passed with it into the hands of the Baby-Less than a century and a half later, lonians. Nebuchadnezzar, King of Babylon, took Jerusalem, and led the other section of the Jewish nation captive. Thus all Palestine lost its nationality, and was ruled by a provincial satrap. Under the rule of Cyrus the captive Jews were permitted to return to their own land. Ezra and Nehemiah reëstablished the ancient worship and rebuilt the temple; but politically the country remained a province of the Babylonian and Persian empires till the time of Alexander the Great, when it fell under Greek rule.

PHYSICAL GEOGRAPHY.

X.-Definition.

The Physical Geography of Palestine describes the actual state of the surface of this country in respect to the three great divisions—land, sea and air, together with the natural history of these divisions.

OLD TESTAMENT ARCHÆOLOGY.

XI.-General Features.

The first noticeable general feature of the country is its geographical isolation. It stands midway between the great empires of Egypt and Assyria, being separated from each by the desert—the wildernesses of Paran and Shur to the south, and the Syrian or North Arabian Desert to the east. From the western world it was shut out by the long and almost harborless coast of the Mediterranean; and from northern Syrian by the mountain ranges of Lebanon and Hermon.

The next general feature to be noticed is the irregularity and variety of the country. It is a land of mountains and hills; of deep valleys and rich plains; of snow-capped mountains, and the gorges of rushing streams; a land locked in by oceans and deserts.

As varied as is the general surface of the Land so varied are its climatic conditions. Between the torrid heat of the Dead Sea basin and the arctic cold of the Lebanons and Hermon are almost all ranges of temperature with their characteristic features.

In short inspiration gives, in brief, an accurate description of the physical geography of the Land when it speaks of it as "a good land, a land of brooks of waters, of fountains and depths, springing forth in valleys and hills; a land of wheat and barley, and vines and fig trees and pomegranates; a land of oil olives and honey; a land wherein thou shalt eat bread without scarceness, thou shalt not lack anything in it; a land whose stones are iron, and out of whose hills thou mayest dig brass; a land of hills and valleys, and drinketh water of the rain of heaven; a land which the Lord thy God careth for; the eyes of the Lord thy God are always upon it, from the beginning of the year even unto to the end of the year." Deut. 8:7–9 and Deut. 11:11, 12. R. V.

The two general land features of the country are therefore on the one hand its mountains and hills, on the other its valleys and plains. The mountain or hill country, from the southern cities of Judah up to the rocks of Lebanon, was that in which the population was chiefly massed. The physical character of this part of the country precluded, for the most part, the grain cultivation of the plain, and induced the careful terracing of the hills, where the vine, the fig tree, and the olive were the staple products. In the early historical period of the country, the days of the patriarchs, those terraces had not vet been formed, but the forest still covered the hills. On the other hand, we find on the seaboard the various maritime plains of surpassing richness yielding in profusion their grains and fruits, with rich gardens and orchards round the cities. In these plains frost is unknown. drought rare, and the water supply abundant. With these maritime plains are to be connected the inland plains, notably among which is the broad plain of Jezreel or Esdraelon in the district of Lower Galilee. Perhaps the most remarkable feature of Palestine is the Jordan Valley, which runs straight through the Land from north to south, being everywhere below the level of the ocean, and having a nearly uniform breadth of about ten miles from brow to brow of the abrupt cliffs on either side. The territory east of the Jordan forms a track of table-land having an elevation of from 2,000 to 3,000 feet.

The chief features of the tribal territories were as

follows:—Judah, Benjamin, Ephraim, Naphtali; Reuben and Gad were mountainous districts. Simeon and the eastern half of Manasseh were partly desert districts. The western half of Manasseh was a wooded mountain district. Dan, Issachar, Zebulon and Asher were chiefly districts of rich plains.

XII.-Land Surface.

Giving the principal mountains, valleys, plains, deserts, etc., with data relative to them.

1. Mountains. Location, elevation, etc.

a. Abarim; i. e. "Mountains beyond Jordan"; the range of Nebo; run north and south; in Rueben and Gad; see Nebo; Deut. 32:49.

b. Adummim; the "going up of"; at north border of Judah; Josh. 15:7.

c. Akrabbim; "ascent of"; a hill or chain of hills just south of the Dead Sea; Josh. 15:3; Num. 34:4; off the southeastern border of Judah.

d. Amana; near Hermon, southern part of the Anti-Lebonon range; Song of Songs 4:8.

e. Baal Hamon; in Song of Songs 8:11 perhaps same as Amana.

f. Baal Hermon ; in Judg. 3:3; same as Hermon, which see.

g. Bether; in Song of Songs 2:17; possibly hills round Battir, west of Bethlehem in Judah.

h. Carmel; in Manasseh or Asher; Josh. 19:26; is twelve miles long, and 1,740 feet above the sea.

i. Ebal; in the northern part of Ephraim; 3,076 feet; Deut. 11:29.

j. Gerizim ; in the northern part of Ephraim; 2,848 feet; opposite Ebal; Deut. 11:29.

k. Gilboa; on the east of the Plain of Jezreel or Esdraelon; 1,500 feet above the sea; in Issachar; 1 Sam. 31:1; 2 Sam. 1:21.

l. Gilead (1); east of Jordan; territory_ of Gad; Gen. 31:21.

Gilead (2); a portion of Gilboa; see above; Judg. 7:3.

m. Hermon; northern boundary of Palestine; 9,376 feet; called also Baal Hermon, Sirion, Shenir and Sion; Deut. 3:8, etc.

n. Hezron; southern border of Judah (Simeon); Josh. 15:3.

o. "*Hill of Bashan*"; eastern boundary of the Holy Land; about 5,600 feet; Psa. 68:15.

p. Hor; in Arabia Petræa and forming part of the mountain chain of Seir; 2,360 feet; Num. 33:37–41.

q. Horeb ; = Sinai, which see.

r. Lebanon; the well known chain of mountains on the north, 8,500 feet at highest point, and the Anti-Lebanon chain 8,700 feet.

s. Moriah; according to the Samaritans = Gerizim; according to others at Jerusalem; Gen. Ch. 22; 2 Chron. 3:1.

t. Nebo; east of Jordan, land of Moab, over against Jericho, a summit of the Abarim range; Deut. 32:49, etc.; 4,000 feet above the plain.

u. Olives; east of Jerusalem; Zech. 14:4.

v. Pisgah; apparently about the same as Nebo, which see; Deut. 34:1.

w. Salmon or Zalmon; mountain south of Mount Gerizim: Judg. 9:48; Psa. 68:14. x. Seir (1); the mountains round Petra, south of Dead Sea; Gen. 14:6.

Seir (2); mountain on borders of Judah; Josh. 15:10.

y. Shenir and Senir ; = Hermon, which see; Deut. 3:9.

z. Sinai; now called Jebel Musa, Sinaitic peninsula; highest point of the chain 8,537 feet above the sea; Ex. Ch. 19, etc.

aa. Sion and Zion; applied to the Upper City of Jerusalem, and to the southern hill of Jerusalem, and to the whole site of Jerusalem; Psa. 133: 3, etc.

bb. Sirion ; = Hermon, which see; Deut. 3:9.

cc. Tabor; on the northeast of the Plain of Esdraelon; 1,850 feet above the sea; Josh. 19:22.

dd. Zalmon; see Salmon w.

ee. Zion ; see Sion aa.

2. Plains and Deserts. Location, extent, etc.

a. Abel Shittim and Shittim; i. e. "the meadow" or "plain of acacias"; in the land and plains of Moab; foot of Nebo; Num. 33:49; 25:1.

b. Argob; a desert district in Bashan, or eastern half of Manasseh; a great rugged field of basalt having an area of 500 square miles; Deut. 3:14.

c. Ciccar; a general term applied to a certain plain or plains, and having also the sense of a valley, or better of a plain in a valley, so we read of "the plain (Ciccar) of the Valley of the Jordan," and "the plains (Ciccar) of the Jordan," and the Cities of the Plain were cities of Ciccar, from which it appears that the Ciccar included not only the plain of Jericho but extended at least as far north as the region of Succoth, *i. e.* north of the river Jabbok in central Gad, and so

30

it embraced part of the Jordan Valley. Gen. 13:10, 11, 12, etc. See \S 8, 1, h.

d. Cities of the Plain; see what immediately precedes in c.

e. Esdraelon ; plain of, see Jezreel.

f. Jericho; plain of; also called "the plain of the valley of Jericho"; the plain about Jericho, forming the southern part of the Ciccar, which see above, c; Deut. 34:3.

g. Jeshimon; the desert west of the Dead Sea, between that and the Hebron mountains, in Judah; called in Math. 3:1, the "Wilderness of Judea"; Num. 21:20; 1 Sam. 23:19.

h. Jezreel; plain of, or Esdraelon; the great, rich plain of basaltic loam in Issachar; measures fourteen miles north and south by nine miles east and west; 250 feet above the sea; the historic battle plain of Palestine; 1 Sam. 29:1-11.

i. Jordon; plains of, see Ciccar above.

j. Megiddo; plain of, adjoining or part of the great plain of Jezreel or Esdraelon, which see, h.

k. Midbar; desert; see § 8, 1, o. Southern Judah.
l. Mizpeh; land or plain of, west of Hermon; Josh.
11:3.

m. Paran; desert of; the great wilderness of the Sinaitic Peninsula, having the desert of Shur on the west, and the desert of Zin or Sin to the east; Num. 10:12, etc.

n. Philistia; plain of; southern part of the great Maritime Plain south of Carmel; western Judah.

o. Shephelah ; the plain or the low hill districts of Judah and Simeon, the northern portion of which was Sharon.

p. Sharon; plain of; the broad, rich tract of land in the southwest of Palestine, lying between the mountains of the central part and the Mediterranean, and being the northern continuation of the Shephelah; 1 Chron. 27:29; Song of Songs 2:1. There seems to have been two other plains of Sharon, one in Galilee and a transjordanic one.

q. Shur; desert of; the desert northwest of the Wilderness of Paran, and extending along the Mediterranean between Palestine and Egypt; Gen. 16:7, etc.

r. Sin or Zin; desert of; east of desert of Paran, from south of Dead Sea to Gulf of Akabah, and appears to answer to the present basin of the Arabah: Num. 33:11, etc.

s. Zin; see immediately above, r.

3. Valleys. Location, etc.

a. Achor; valley of, between Jericho and Jordan; Josh. 7:24.

b. Arabah; the valley or depression of the Jordan especially that part of it extending from the southern point of the Dead Sea southward to the Gulf of Akabah; Deut. 1:1, etc.

c. Aijalon or Ajalon: valley in Dan; Josh. 10:12.

d. Berachah; a valley in the direction of Tekoa, south of Bethlehem; 2 Chron. 20;26.

e. Dead Bodies; valley of; vicinity of Jerusalem; Jer. 31:40.

f. Decision; a name poetically given to the Valley of Jehoshaphat, q. v.; Joel 3:2, 12, 14.

g. Elah; valley in Dan; 1 Sam. 17:2.

h. Hinnom; the valley bounding the site of Jerusalem on the south; Josh. 18:16, etc. *i. Jehoshaphat*; the valley between Jerusalem and the Mount of Olives; Joel 3:2.

j. Jezreel; runs from the plain of Jezreel or Esdraelon east; Josh. 17:16.

k. Jordan; the valley through which the river Jordan flows, and at different places called by different names, as e. g. Ciccar; 2 Chron. 4:17.

l. Kedron; valley and brook; west of Olivet, east of Jerusalem; taken to be about the same as the Valley of Jehoshaphat; 1 Ki. 2:37.

m. Shaveh; vale of, called also Kings Vale; not certain; vicinity of Jerusalem; Gen. 14:17.

n. Shechem; the vale between the mountains Ebal and Gerizim; Gen. 12:6.

o. Siddim; vale of, the Dead Sea basin; Gen. 14:3.

p. Sorek; a Philistine valley; Judg. 16:4.

q. Succoth; a portion of the Jordan Valley bordering on Gad; Psa. 108:7.

r. Rephaim; vale of; extending from near Jerusalem towards Bethlehem; Josh. 15:8.

Zeboim; a valley mentioned as being "towards the wilderness" east of Michmash, in Benjamin, or north of Jericho; 1 Sam. 13:18.

XIII.-Water Surface.

The seas, lakes, rivers, etc. of Palestine are chiefly as follows:

a. Abana; a river rising north of Hermon and flowing to Damascus; 2 Ki. 5:12.

b. Arnon; river, east of Dead Sea, southern border of territory of Reuben; Deut. 2:24.

c. Ashdoth Pisgah; *i. e.* streams of Pisgah; appar[3]

ently the springs now called Ayun Musa under Mt. Nebo; Deut. 3:17.

d. Beer Lahai Roi; well; between Bered and Kadesh, south of Beersheba in Simeon; Gen. 16:14.

e. Besor; brook; near the Wilderness of Shur; 1 Sam. 30:9.

f. Chinnereth; i. e. Sea of Galilee; Num. 34:11; extreme length twelve and one-half miles, maximum width eight miles.

g. Dead Sea; called in the Old Testament the Salt Sea, Gen. 14:3; the Sea of the Arabah or Plain, Deut. 3:17; and the Eastern Sea, Joel 2:20; the sea is about forty-six miles in length, with an average width of ten miles; the depression of the sea is 1,290 feet below the Mediterranean, or the lowest depression in the earth's surface; there is a difference in the level of several feet as between summer and winter; receives the water of the Jordan and its affluents, and without any visible outlet, maintains its level by excessive evaporation; the water contains twenty-six per cent. of solid matter, of which half is common salt, and a large proportion of chloride of magnesium.

h. En-gedi; spring, near the present ruin of that name on west shore of Dead Sea, and the Bay of En-gedi on west side of same sea; Josh. 15:62.

i. En-rogel; i. e. "the fullers spring"; a spring that formed one of the landmarks on the boundary line between Judah and Benjamin; just outside Jerusalem; 1 Ki. 1:9.

j. Gihon; spring, fountain or pool; just outside Jerusalem; at the east end of the aqueduct which has the Pool of Siloam at its west end; 1 Ki. 1:33, 38.

k. Harod; a spring or fountain not far from Jezreel and Mt. Gilboa; Judg. 7:1.

l. Jabbok; river east of the Jordan in central Gad, descends from Mt. Gilead, flows westward into the Jordan; Deut. 3:16, etc.

m. Heshbon; pools of, northeastern part of Reuben; Song of Songs 7:4.

n. Jordan; river; formed by the junction of three streams; the highest source is on Hermon, the second near the supposed site of Dan (Gen. 14:14), the third source in the grotto at Banias (the ancient Cæsarea-Philippi); flows from north to south through the length of the Land, passing through the Waters of Merom, the Sea of Galilee, and empties in the Dead Sea; from its rise on Hermon to Dead Sea about 100 miles, but the river's course traverses at least 200 miles, and throughout nearly its entire course is below the level of the sea; Gen. 13:10; Josh. 4:1, etc.

o. Kanah; brook; one of the main drains of the mountains immediately south of Gerizim; flows westward forming the north border of Ephraim and Dan, and empties in the Mediterranean; Josh. 17:9.

p. Kedron or *Kidron*; applied to the brook or winter torrent which flows through the Valley of Jehoshaphat on the east side of Jerusalem; 2 Sam. 15:23, 30.

q. Kishon; river; drains the Esdraelon plain, flows northwest beneath the ridge of Carmel, empties into the Mediterranean; Judg. 4:7.

r. Leontes; river; rises near Baalbek, flows southwest and west, empties into the Mediterranean five miles north of Tyre; total length eighty miles.

s. Mediterranean Sea; called in the Old Testament "the Great Sea" (Num. 34:6), "the Sea" (Josh. 19: 36), "the Sea of the Philistines" (Ex. 23:31), and "the hinder," that is, Western "Sea" (Deut. 12:24) in distinction from the forward, that is, Eastern Sea, viz. the Dead Sea; bounds Palestine on the west.

t. Merom; waters of; now called Lake Huleh; four miles long; north of the Sea of Galilee; Jordan runs through it; Josh. 11:5.

u. Nephtoah; waters of; southwest of Bethlehem on boundary of Benjamin and Judah; Josh. 15:9.

v. Nimrim; waters of; in the southern part of the Jordan Valley; Isa. 15:6.

w. *Pharpar*; river; has its main source on Hermon, flows across the whole plain of Damascus a short distance south of the city; 2 Ki. 5:12.

x. River of Egypt; in several places generally refers not to the Nile but to the valley and winter torrent now called Wady-al-Arish midway between southern border of Palestine and Egypt in Desert of Shur; Num. 34:5.

y. Shihor; i. e. the River Nile of Egypt, q. v.; Josh. 13:3.

z. Siloah and Siloam; pool, spring, stream; southern part of the city of Jerusalem; Neh. 3:15.

XIV.-Geology.

The Lebanon and Anti-Lebanon ranges consist mainly of hard crystalline limestone, with an overlaying formation of soft white chalk, whence the mountain obtained its name Lebanon, or "milk white." The same hard crystalline limestone forms the bulk of the Hermon block; while the overlaying chalk is visible on the Anti-Lebanon immediately to the north.

The same formations occur throughout Palestine

36

west of Jordan; but in the centre of the country, and on the higher hills of Upper Galilee traces of nummulitic limestone overlie the chalk. About half of the height of Mt. Gerizim is formed by this limestone, which is hard, dark, and full of nummulites.

South of Hermon the submarine formations are disturbed by various volcanic outbreaks, the principal centre of which is found in the Argob district, east of Jordan, in Bashan, where there is a basalt field, having an area of about 500 square miles. The plateau of southwest Bashan, east of Upper Galilee, is also broken by volcanic cones and craters; while the shores of the Sea of Galilee, and the plateaus and plains west and southwest of the lake are covered with lava. These eruptions have been dated as belonging to the early Tertiary period, and the cretaceous formations of Galilee have been all more or less affected by them.

Throughout Palestine proper the chalky formations occur, with the hard underlying limestone often appearing denuded on the surface. South of Hebron the lower bed disappears, and the chalk covers the whole country.

An older formation, the Nubian sandstone, underlies the hard Neocomian limestone. It appears in Lebanon, and on the east side of the Jordan Valley, opposite Shechem, and it forms Mt. Hor and hills round Petra. It extends southwest across the Arabah, or valley between the Dead Sea and Red Sea, and appears also in the neighborhood of Sinai. Igneous formations lie beneath it near Petra; and the chains of Sinai and of the Serbal are formed of different varieties of granitic rock.

The Nubian sandstone, though visible all along the

east side of the Dead Sea, and in the Arabah, is never seen west of the Jordan; and hence it appears most probable that the Jordan Valley is formed by an immense fault running north and south from the foot of Hermon. Other evidences of this exist.

From the geological history of the Jordan Valley, and of the Dead Sea, it is clear that the formation of the Dead Sea did not take place within historic times. In the Cretaceous period it appears quite certain that the Jordan Valley extended to the Red Sea; but shortly after that epoch disturbances, accompanied by volcanic eruptions took place. The watershed of the Arabah was then raised nearly 800 feet above the sea; and the Jordan Valley, formed by a longitudinal fault, sank to the depth of nearly 1,300 feet below the Mediterranean. A chain of at least four inland lakes was thus formed, the shores and beds of which may still be traced. As the evaporation increased, these lakes appear to have dried up gradually, leaving raised beaches still existing; so that they are at the present day represented only by the small sheets of water known as the Lake of Merom, the Sea of Galilee, and the Dead Sea.

From the scientific history of the valley, it is evident that the theory which ascribes the formation of the Dead Sea to the time of the overthrow of the Cities of the Plain, is false, as well as not supported by the words of Scripture; and the Cities of the Plain were not built on any part of the present bed of the Dead Sea.

XV.-Meteorology.

The Meteorology of Palestine is a description of the atmospheric phenomena of that country in relation to

38

weather and climate, as, *e. g.* seasons, temperature, rains, winds, etc.

1. Temperature.

From the physical character and perpetually changing altitudes of the country as set forth in the preceding sections, it might be inferred that there would be found great variations in climate. Probably there is no country in the world of the same extent that shows such a great variety in temperature as Palestine. This is indicated also by the vegetation. On the top of Hermon we are in the region of perpetual snow. On the hills of Bashan and Upper Galilee the oak and pine flourish. On the hills of Judea and Samaria the vine and fig tree thrive. On the maritime plains the palm and banana are at home. In the basin of the Dead Sea we find tropical heat and tropical vegetation.

The greatest extremes of temperature are experienced in the southern deserts. In winter the mercury falls considerably below the freezing point while in summer the thermometer ranges to 90° .

At Jerusalem the climate is mild, frost rare. The coldest month is January, the hottest July. The mean temperature for January varies from 47° to 49°. The mean temperature for July is about 79°.

In Nazareth and Nablous (the ancient Shechem) the winter temperature is considerably higher than at Jerusalem. The summer heat in these places is somewhat modified by the cool breezes from the Lebanon.

Snow rarely falls in the above mentioned places. When it does it remains only a few hours at Jerusalem, while it may remain a few days in Galilee before entirely disappearing.

In the maritime plains the temperature is very much

higher than in the highlands, and the crops are about a month in advance of those near Jerusalem. This is especially true of Sharon and the lowlying coast plains where frost and snow are unknown.

The climate of the northern frontier, Hermon and Lebanon, varies according to elevation, from the genial warmth of the lower valleys to the almost arctic severity of the mountain tops, covered with all but perpetual snows, and attaining a height of about 10,000 feet above sea level.

More tropical than any other part of the country is the climate of the Jordan Valley. On the shores of the Sea of Galilee, which is 650 feet below sea level, this change of temperature is unmistakably seen, the depression of the valley causing a sudden change from the climate and products of the Galilean hills around.

Descending the Jordan Valley, the climate steadily increases in temperature, till the maximum is reached on the shores of the Dead Sea, where, during January, the mean temperature of the day is about 67° , with a fall during the night. In April the thermometer registers about 105° in the shade, while in mid-summer the heat is most intense.

2. Seasons.

The climate of Palestine is both naturally and scripturally divided into two seasons, summer and winter. These seasons succeed each other with scarcely any intermediate gradations. The summer commences with the harvest in April, and continues until the "former rain" in November. The remaining months of the year constitute the winter. Many Scripture passages speak of the "early rain" or "former rain," *i. e.* the rains of autumn and winter, and the "latter

40

rain," or showers of spring. Note Deut. 11:14; Jer. 5:24; Hos. 6:3; Joel 2:23. A slight difference in different parts of the country is observed as to when "seed time" and "harvest" begin, depending upon the altitude.

According to the rabbinical idea as set forth in the Talmud the seasons are six in number, *viz.*:

a. Seed-time: from October to December.

b. Winter: from December to February.

c. Cold: from February to April.

d. Harvest: from April to June.

e. Heat: from June to August.

f. Summer: from August to October.

This division is apparently based upon Gen. 8:22. The divisions however are arbitrary.

3. Rain.

The Old Testament employs two generic words for rain, viz., matar = "rain," and geshem = "a pouring rain." The Old Testament also makes the twofold distinction of yoreh = "the former rain," and malkosh = "the latter rain." The former rain falls from the latter part of October till in the first part of December. The latter rain falls in March and April. (See what precedes in this section under Seasons.) The former rain never failed, excepting at times of special visitation from the Lord; 1 Ki. 17:1. The latter rain was more uncertain, and has ever been looked for with anxiety by the inhabitants of the country, for on its copiousness depend the hopes of the harvest. Note Job 29:23; Prov. 16:15; Jer. 3:3; Zech. 10:1. The occurrence of rain after the corn is ripe is scarcely known, and thus we find it suggested as an image of what is most incongruous. Prov. 26:1.

The rainfall of Palestine is very great, and there is no sufficient ground to support the theory that it has diminished in modern times. The rainfall of Jerusalem varies from eighty-five to forty-four inches. The greatest rainfall registered in Jerusalem for the three months, December, January, February, is 72.4 inches.

The rainfall of the Jordan Valley is less than that of the coasts or the highlands east and west of it.

Thunder is not uncommon in winter, but is unknown in summer. Hence the awe with which the Israelites heard the thunder invoked by Samuel during wheat harvest, *i. e.* May. See 1 Sam. 12:16–19.

4. Winds.

The winds in Palestine are remarkably regular, both in their seasons and their effects. The north and south winds prevail for a greater length of time and with more beneficial effects than the east and west winds.

The east and west winds were rather injurious in their effects. The east wind was especially withering, tempestuous, violent. Ezk. 17:10; Hos. 13:15; Psa. 48:7; Isa. 27:8.

The north wind was strong and refreshing, cool and strengthening. The south wind was a warm, moist breeze. Both alike were blessed in their effects, tending to the growth and strength of all life. Song of Songs 4:16.

In the Jordan Valley the wind blows in the winter down the valley from the north, and in summer up the valley from the south, uniformly.

XVI.-Botany.

The botanical and floral illustrations and allusions of the Bible are numerous, and for the most part confined to the vegetable products of three countries, *viz*. Palestine, Egypt and the Arabian Desert. Those of Palestine alone will be enumerated here.

Out of Palestine's strangely varied climate springs a corresponding complexity in the vegetable and animal life of the country. Lebanon's successive zones of vegetation produce the pine, cypress, juniper, green oaks, cedar, ash, box, poplar, oleander, mulberry, oranges, apricots, almonds, palm, olive, pomegranate, vine, fig, terraced slopes for grain, etc. In the lofty table-lands beyond Jordan, pine forests cover the tops of the highest hills, while lower down woods of evergreen oak still flourish in Gilead and Bashan, and mingled with these is the rich foliage of the myrtle, arbutus, locust tree, etc. In the territories of Moab and Ammon the terebinth grows up out of rich pastures. In Upper Galilee, besides the oak woods, a dense undergrowth of mastic, hawthorne and spurgelaurel overspreads the hills. In Lower Galilee corn, cotton, and almost every species of vegetable grow luxuriantly. Nazareth has still its palms and cypresses, its fig-trees and gardens. The Vale of Shechem, the richest in the whole land, and watered by eighty springs, produces in abundance figs, walnuts, mulberries, oranges, lemons, olives, pomegranates, vines, etc. Judea has its olive yards, vineyards, almonds, oranges, etc. The northern portion of the Waters of Merom is covered with an immense tract of floating thickets of papyrus. The Sea of Galilee is at times set in a frame of oleanders: the Jordan is lined with a thick jungle of reeds, tamarisks, etc.; balsam, cypress and anciently palm trees flourished in the vicinity of the Dead Sea. The Philistine plain is rich in gardens and

orchards. In short, between Beersheba and Hermon not less than 1,000 species of plants have been recorded as natives of Palestine, and the whole number of species probably reaches 2,000.

The Old Testament employs the following terms to denote collective vegetation:

a. Yaar. It is generally translated "forest" or "wood." The term is applied to any considerable assemblage of trees, whether timber or fruit-bearing, and irrespective of dimensions. 1 Ki. 7:2; Isa. 37: 24; Ee. 2:6, etc.

b. Koresh. Is also translated "wood," "forest," etc. According to usage a better rendering would be a thick undergrowth or underwood. 1 Sam, 23:15, 16; Isa. 17:9, etc.

c. Sobek and Sebak. Is rendered "thicket," which is sufficiently accurate, denoting as it does a tangled thicket or jungle.

d. Eshel. Is translated in the Authorized Version "grove," but is more correctly rendered in the Revised Version by "tamarisk," according to the Arabic. Gen. 21:33, etc.

e. Asherah. Is also translated "grove" by the A. V. while the R. V. transliterates the word, thus sing. Asherah, pl. Asherim. It is applied to a constructed wooden object of idolatrous worship. It is strictly a wooden obelisk and comes down from the obelisk and sun worship of the ancient Egyptians. The Muhammadan Mulid en-Nebbi, or celebration of the birth of the Prophet, still preserves a remnant of this ancient worship in the festivities connected with what is called *essaree*, in which we see the Hebrew name also preserved. See Lane's Modern Egyptians, Vol. II. p. 166. Ex. 34:13; 1 Ki. 14:15, etc.

In cataloguing what is included under the Botany of the Old Testament we begin with

1.-Trees and Shrubs.

ALGUM (2 Chron. 2:8) and ALMUG (in 1 Ki. 10:11, 12). In A. V. and R. V. it is transliterated "algum trees." Max Müller and others are wrong when they refer it to sandalwood. The Algum tree is indigenous to Arabia, still grows in Arabia, is still called *Algum* by the Arabians, and is still used by the Arabians in the manufacture of musical instruments, etc. precisely as in 1 Ki. 10:11, 12.

ALMOND. Jer. 1:11. Native of Palestine, and earliest tree to blossom. Perhaps this latter fact gives it its Hebrew name which comes from a verb meaning to hasten. Note Eccles. 12:5 in this connection. Aaron's rod was from the almond tree. Num. 17:8. Almond blossoms formed the pattern of the "bowls" or "cups" of the golden candlestick of the tabernacle. Ex. 25:33. The Hebrew *luz* rendered "Hazel" in the A. V. should be *almond*; so R. V.

ALOES; LIGN-ALOES. Psa. 45:8. The Hebrew word is *Ahalim* and *Ahaloth*, used only in the plural, and in only four passages. The rendering "aloes" or "lign-aloes" is wrong, and shown to be wrong by the form and usages of the word in those passages and their context where the word occurs, *e. g.* Psa. 45:8. The Arabic root-word corresponds precisely with the Hebrew, both *ahal*. According to the Arabic then, and according to every usage of the word in the Bible the term can only refer to one of the species of Theban or fan palm remarkable for its excellent appearance and delightful fragrance. What is stated about the Ahalim in the Bible is altogether against *aloes* and altogether in favor of this fragrant palm. So in Psa. 45:8 instead of reading "aloes, and cassia," we should read "and cuttings of the fragrant palm"; and as the Hebrew grammatical construction further shows. See the Author's Critical Note in Presbyterian Review, July, 1885.

APPLE. Joel 1:12, etc. Mentioned six times in the Old Testament, and of these four in the Song of Songs. It is doubtful what tree is intended. There are various claims. The root (tafah not nafah) meaning is to be of a sweet odor in Hebrew and Arabic. The apple is indigenous to Arabia, is very fragrant, and hence so-called. In one passage of The Song and perhaps two the word should be rendered sweet odors and not apples, *i. e.* 2:5; 7:8.

ASH. Hebrew *oren*, only in Isa. 44:14. A. V. "ash," R. V. "fir tree." Arabic '*Aren* a tree resembling the plane or box thorn.

BALM; BALSAM. Grows in the region of Jericho, in Gilead and in Arabia and Nubia. A small evergreen tree. The balsam obtained from the bark by incision. Used medicinally and for its fragrant scent. Jer. 8: 22; Gen. 43:11.

BAY TREE. Psa. 37:35. See Revised Version.

Box. Isa. 61:19. And see R. V. of Ezek. 27:6.

BURNING BUSH in Ex. 3:2–4 and Deut. 33:16. Generally taken as referring to the Egyptian and Arabian sunt or Acacia Nilotica. The Hebrew and Arabic word is seneh, the root meaning of which word is to gleam brightly, to shine. The Arabian shrub or small

46

tree so called does shine, while its fruit when dried and put in motion by the wind emits a musical sound.

CAMPHIRE. Song of Songs 1:14; 4:13. Should be rendered *Henna* as in R. V. It is the *Lawsonia inermis* of botanists, and the Henna shrub of Egypt, Arabia, etc. Found on the shores of the Dead Sea at Engedi. A shrub eight or ten feet high, pale green foliage, clusters of white and yellow blossoms of rich strong perfume. A bunch of the blossoms is still worn by eastern women at night on their bosoms. Song of Songs 1:14.

CAPER. See Hyssop.

CASSIA. In Ex. 30:24. Supposed to be an inferior cinnamon.

CASSIA. In Psa. 45:8. See under Aloes above.

CEDAR. Psa. 104:16. The well-known Cedar of Lebanon. Frequently mentioned. Used also in many Scripture passages as a type of grandeur, might, prosperity, etc. Noted also for fragrance. Song of Songs 4:11.

CHESTNUT. Gen. 30:37; Ez. 31:8. Should be Plane tree; so R. V.

CINNAMON. Ex. 30:23. An exotic. Grows to the height of thirty feet. One of the principal spices in the directions given for compounding the "anointing oil" of the sanctuary.

CITRON. Lev. 23: 40. See Revised Version.

CYPRESS. Isa. 44:14. The species is doubtful. R. V. "holm tree."

EBONY. Ezek. 27:15. Brought into Palestine by the merchants of Dedan, eastern Arabians.

ELM. Hos. 4:13. Should be *terebinth*. So R. V. FIG. Gen. 3:7; Deut. 8:8, etc. Not the sycamore.

One of the rich characteristic products of Canaan; Num. 13:23. The failure of a divine judgment; Psa. 105:33. Type of peace, security, prosperity; 1 Ki. 4: 25; Isa. 36:16. Under favorable conditions the figtree bears as many as three crops of fruit in the year, the first being esteemed a delicacy; Isa. 28:4, R. V. Used medicinally; 2 Ki. 20:7.

FIR. Isa. 60:13. The Hebrew word is *Berosh*. The word seems to comprehend all the coniferous trees of Palestine excepting the cedar and juniper. That is it includes the four species of Pine, and the Cypress. The species are *Pinus Maritima*, *P. Halepensis*, *P. Carica*, etc.

FRANKINCENSE. Song of Songs 3:6; 4:14; Isa. 60:6. The produce of a tree known as the *Boswellia thurifera*. A light yellow gum. One of the four aromatic ingredients named as components of the holy incense. Ex. 30:34, 35.

GOPHER WOOD. Gen. 6:14. Uncertain. According to the Arabic a tree furnishing a wide board and of a resinous nature.

HAZEL. Gen. 30:37. See Almond.

HEATH. Jer. 17: 6–8. The Hebrew is Arar. The Arabic is precisely the same. The Arabic is the name of the *juniper* growing in some parts of the Arabian desert. Its wood is used by the Arabs for kindling and fire, while its fruit, first green then white becomes finally black as charcoal. Hence note the contrast between verses 6 and 8 in the 17th of Jeremiah.

HEMLOCK. Hos. 10:4. The Hebrew word *Rosh* rendered both "gall" and "hemlock" is supposed to refer to the Poppy except when it denotes the poison or venom of serpents.

JUNIPER. 1 Ki. 19:4. Not to be confounded with any species of juniper. It is a species of Broom, a leguminous or pod-bearing plant, growing to a height of eight or ten feet, still called by the Arabs *retem*, similar to the Hebrew. Arabs still avail themselves of its shelter, 1 Ki. 19:4, 5; while its coals still have a proverbial fierceness, Psa. 120:4. The root is bitter and nauseous, Job 30:4.

MULBERRY. 2 Sam. 5:24. Doubtful what tree is intended. Referred by some to a species of the Poplar.

MYRRH. Psa. 45:8. It is the gum of a species of *Balsamodendron*. The tree is low and indigenous to Arabia. Myrrh is mentioned once as an ingredient in the "anointing oil" of the Tabernacle, Ex. 30:23. In Gen. 37:25 and 43:11 the Hebrew word *lot* translated "myrrh" should be translated *ladanum*. (See under next number.)

MYRTLE. Isa. 55:13. In Isaiah's glowing predictions of future prosperity. The returned Jews under Nehemiah constructed from it booths at the Feast of Tabernacles. The Hebrew word is *hadas*. Its feminine form Hadassah was the name of Mordecai's cousin, better known to us under her Persian title of Esther.

NUTS. There are two Hebrew words. *Egoz*, which refers to the *Walnut*; Song of Songs 6:11. The other *Botnim* is the *Pistachio nut*; Gen. 43:11.

OAK. Gen. 35:4, etc. No less than six Hebrew words all derived from the same root are rendered "oak" in our version. One of these *elah* is properly the Terebinth or Teil tree, q. v. Besides evergreen oaks and deciduous oaks, there are no less than nine species of the oak in Palestine, three species being common. OIL TREE. Isa. 41:19. *Oil tree* is the exact rendering of the Hebrew. Not the Olive which has its own name, but the *Oleaster*, a small tree common in all parts of Palestine except the Jordan Valley.

OLIVE. Gen. 8:11, etc. The well-known tree. Prominent among the blessings of the Land of Promise. Deut. 8:7, 8. Emblem of blessing. Psa. 52:8. Mark of divine anger when it casts its fruit. Deut. 28:40. With the Prophets a type of religious privilege, beauty, luxuriance, strength. Jer. 11:16; Hos. 14:6. It was the rich blessing of Asher. Deut. 33:24. Such is the territory once occupied by Asher still, *i. e.* the Phœnician Plain. The oil used for the anointing of priests, kings, prophets. Used with the offerings in sacrifice. Used medicinally. Used for food, etc. The wood supplied the cherubim, the doors, and the posts for the temple of Solomon. 1 Ki. 6:23, 31, 33.

PALM TREE, *i. e.* the DATE PALM. Song of Songs 7:7, etc. Hebrew *tamar*, Arabic *tumr*. Frequently mentioned, beside giving names to persons and places, and being a title to Jericho, "the eity of palm trees." The most beautiful and most useful of all trees; Ps. 92:12. Among the most precious of fruit-bearing trees; Joel 1:12. The palm leaf was first used, ecclesiastically, at the annual Feast of Tabernacles. Its beauty rendered it a favorite object of artistic design; so it appears in Solomon's temple, and among the ornaments of the mystic edifice seen in vision by the prophet Ezekiel 40:26, 37.

PINE. Isa. 41:19. And in Neh. 8:15 instead of "pine branches" read *Oleaster*, same as above. The pine of Isaiah is uncertain, perhaps the *plane*.

POMEGRANATE. Deut. 8:8. A small tree or shrub

eight or ten feet high. Blossom bell-shaped; fruit large; within the rind the edible pink seeds divided in sections by a membrane from the rind. A favorite fruit in Egypt before the Exodus, and murmured for by the Israelites in the wilderness; Num. 20:5. The robe of the Jewish high priest had an embroidery of "pomegranates of blue, and of purple, and of scarlet, round about the hem thereof"; and the same device appears again on the carved work of the pillars for the porch of the first Temple. It was included in the promise of fruit-bearing trees to the Israelites about to enter the Land. It gave its name to a number of towns and villages, among them Gath-rimmon one of the Levitical cities: (rimmon being the name for this fruit in Hebrew and Arabic). The prophet Joel bewails the "withering" of the pomegranate, while Haggai promises its increase to the remnant of the Captivity. Joel 1:12; Hag. 2:19. In the Song of Songs the upper part of the Shulamite's cheeks (not "temple") *i. e.* the part just under the eyes, are compared to the section of a pomegranate (section of the seeds) on account of the oval form and pink white beauty of color. Song of Songs 4:3.

POPLAR. Gen. 30:37; Hos. 4:13. The White Poplar, as its Hebrew name *Libneh* indicates.

SHITTAH TREE, SHITTIM WOOD. Ex. 25:10; Isa. 41:19. The Shittah tree is doubtless the Acacia (Acacia Seyal). The wood of this tree, Shittim, is repeatedly mentioned in Exodus as the principal timber material employed in the construction of the Tabernacle. Of it were formed the boards for the tabernacle, and their cross-bars; the ark of the covenant and its staves; the table of shew-bred and its staves; the pillars on which to hang the veil of the holy of holies; the altar of burnt-offering, and the staves to carry it; and the altar of incense and its staves. It is the only timber mentioned in the list of the offerings of the people in the wilderness. Ex. 25:5. With this corresponds the fact that it is the only timber tree of any size in the Arabian Desert.

SPICERY, SPICES. Gen. 37:25; 43:11. From the way the word is used it would seem to be not a general term, but the produce of some specific plant. From the similar Arabic term it has been identified with the gum tragacanth, obtained from the well known group of Leguminous plants, *Astragalus*.

STACTE. Ex. 30:34. Stacte is the Greek translation of the Hebrew name (*nataf*), which signifies "a drop." It is the "sweet storax," according to the Apocrypha, a juice or gum yielded by the *Storax* officinale, a plant allied to that producing gum benzoin. It is a beautiful, perfumed shrub, growing abundantly on the lower hills of Palestine. One of the components of the holy incense.

SYCAMORE. Amos 7:14. A species of fig tree. Fruit inferior. Wood soft, but durable. Large and abundant in growth.

TEIL TREE, TEREBINTH. Isa. 6:13, etc. Sometimes translated "oak," and sometimes also erroneously rendered "plain" or "valley," 1 Sam. 17:2, 19; also incorrectly rendered "elm," Hos. 4:13. The Hebrew term is *elah* and should be rendered Terebinth tree. It is the *Pistacia terebinthus* of botanists, and the Turpentine tree of the Greek Islands.

VINE. Gen. 9:20; Psa. 80:8. The Land of Promise was beyond all others renowned for its vines. From ancient days the vine has been the chief type of Israel and Israel's inheritance.

WILLOW. Psa. 137:1, 2. Two Hebrew words are translated "willow," *ereb* and *safsafah*, and both refer to the tree of that name as shown by the context.

2.-Herbs and Flowers.

BARLEY. Ruth 1:22. The most universally cultivated cereal in the world. Largely consumed in Palestine as an article both of human and animal food. The seed-time for barley depends upon the "former" or winter rains. It is sown about the same time as wheat, but there is an interval of about three weeks or a month between the conclusion of the barley harvest and the beginning of the wheat harvest. The barley harvest was gathered about the time of the Passover. As over against wheat, barley is a sign of poverty; and a grain inferior to wheat, and held in lower esteem. Hence note the force of several Scripture passages. The jealousy offering ordained in Num. 5:15 was to be a tenth part of an ephah of barley, instead of wheat, as in all other cases, thus indicating the low esteem in which the suspected parties, if guilty, were to be held. So other passages, as Hos. 3:2: Ez. 4:9-12 and 13:19. Gideon, whose family was poor in Manasseh, and he the least in his father's house, overheard one Midianite relate a dream to his companion, wherein he, Gideon, was likened to "a cake of barley bread tumbled into the host of Midian," etc. See Judg. 7:9-14.

BDELLIUM in Gen. 2:12 and Num. 11:7 supposed by some to be an aromatic gum, but is more likely a precious stone. BEANS. 2 Sam. 17:28. The Hebrew name is still perpetuated in the Arabic; and, as anciently, so still, beans are a common article of food especially with the poor. Sometimes mixed with flour for coarse bread, but generally they are stewed whole and eaten with oil. Ez. 4:9.

BRAMBLE, BRIER, THISTLE, THORNS, HEDGE OF THORNS, etc. There are something like eighteen or twenty Hebrew words used to denote different kinds of prickly shrubs and weeds. Among these are

a. Atad. Judg. 9:14. Translated "bramble." From the cognate Arabic word, and from the uses to which the wood, according to the Arabic, is applied, it is more than likely that the Atad is the Rhamnus, a thorny shrub resembling the Hawthorne. This seems to be confirmed by what is stated in Psa. 58:9 when it is remembered that both green and dry the hawthorne forms excellent fuel. In this last passage this same word atad is rendered "thorns."

b. Howah. Rendered "brambles" in Isa. 34:13; "thickets" in 1 Sam. 13:6; "thistle" in 2 Ki. 14:9; and "thorns" in Song of Songs 2:2. By some howah is supposed to refer to the Common Thistle. The Arabic name corresponds to the Hebrew; and the Arabic name is applied to the *prickly hedysarum*, or *hedysarum alhagi*, a prickly plant with a violetcolored flower.

c. Dardar. In Gen. 3:18 and Hos. 10:8 rendered "thistle," and generally admitted to be a species of Knapweed, the Star Thistle, called by botanists *Cen*taurea calcitrapa.

d. Heydek. In Prov. 15:19 and Mic. 7:4. Rendered a "hedge of thorns" and a "brier." Should be rendered in both places a "hedge of thorns" or a "thorny hedge," and the first passage should be rendered "The way of the sluggard is like the catchings (*mesokath*) of a thorny hedge (*hedek*)." According to the usage of the word and according to the Arabic the term includes the idea of an inclosing wall and that wall composed of a thorny hedge. Moreover the precisely corresponding Arabic word indicates precisely the kind of thorny plant composing this hedge, viz. the *Solanum cordatum*, or *sanctum*, or *solomæum*, the latter of this family being familiarly, but incorrectly designated as the "Apple of Sodom."

e. Kos. Gen. 3:18, etc. Rendered "thorns." The term does not seem to refer to any particular plant, but to the prickly or thorny quality of any-such plant.

f. Shamir. Isa. 7:23-25. Rendered "briers." The precisely corresponding Arabic word is applied to a small thorny tree or shrub of the acacia family, the mimosa unguis cati.

g. Naasos. Isa. 7:19. The term is still used in Arabic and applied to a certain thorny shrub, a species of mimosa or of thistle.

h. Barkanim. Only in Judg. 8:7, 16. According to the context barkanim must be some thorny plant that could be used to scourge with. The precisely corresponding Arabic word is applied to a thorny plant which the Arabic botanist describes by saying " it has twigs like whips."

i. Sallon. Ez. 2:6. - Rendered "briers" and "a pricking brier." Probably the *Ruscus aculeatus*.

Other words implying thorny plants occur, but the above are the principal ones.

BRIER. See above, under Bramble.

BITTER HERBS. Ex. 12:8. In the ordinance of the Passover we read "With bitter herbs shall they eat it." The "bitter herbs" included Lettuce, Endive, Chicory, Horseradish and Coriander.

BULRUSH, FLAG, PAPER-REED, REED, RUSH. Six Hebrew words are rendered by these names in our version, *viz*.

a. Gome. Ex. 2:3; Job. 8:11. Rendered "bulrush" and "rush." It is doubtless the celebrated Papyrus of Egypt, which grows also in abundance in the inaccessible marshes of the "Waters of Merom." See also \S 53, 6.

b. Aroth. Isa. 19:7. It is generally agreed that this should be translated "green herbage," like the Arabic.

c. Ahu. Job 8:11. Rendered both "flag" and "meadow." The word is Old Egyptian in origin. It occurs in an early papyrus as ah-ah or akh-akh, which has the meaning of to be verdant. According to the application of the word by the Ancient Egyptians it probably means the sedge, reed, or rank grass by the river's side.

d. Soof. Ex. 2:3, 5; Jon. 2:5. Rendered "flags" and "weeds." Another old Egyptian word in origin where it is called *tufi* or *sufi*. A smaller and inferior species of the papyrus growing along the brink of the Nile. In Jonah it refers to sea-weeds. The Red Sea was always termed *Yam Soof* = the Sea of Weeds.

e. Agmon. Isa. 9:14; Job 41:2. A tall reed or cane still common in Palestine and Egypt, resembling the bamboo.

f. Kaneh. Gen. 41:5, 22. The generic name for a reed of any kind. Sometimes denotes a "stalk" of wheat. It was also the name of a measure of length, equal to six cubits; Ez. 40:5. See § 53, 6.

CALAMUS or SWEET CALAMUS. Ex. 30:23, etc. The Hebrew word is *Kaneh*, the general word for *cane* or *reed*, as see what immediately precedes. This word is qualified by *bosem* = balsam = sweet; but the meaning is sweetness of *odor*, not sweetness of *taste*. The reference is to a fragrant cane or sweet spice coming probably from Arabia. Jer. 6:20. It was one of the ingredients of the holy anointing oil. The word *Calamus* is simply the Latin for " cane."

CAPER. See Hyssop.

CASSIA. Ex. 30:24. See under 1 of this section.

CASSIA. In Psa. 45:8. A mistranslation. The word translated "Cassia" in this passage is simply the feminine plural noun from the verb *to cut* and should be rendered *cuttings*, "cuttings of the fragrant palm." See under *Aloes* No. 1 this section.

COCKLE. Job 31:40. The meaning of the Hebrew word is "stinking weeds."

CORIANDER, Ex. 16:31. The well-known plant and seed of that name.

CORN. There are a number of words in the Old Testament relating to Corn generally, as follows:

a. Dagan. Num. 18:27. A comprehensive term, used of corn as growing without any preparation, and in all cases where the words "corn and wine" occur.

b. Kamah. Judges 15:5. Standing corn.

c. Bar. Gen. 41:49. Clean winnowed corn.

d. Shebir. Gen. 47:14. Corn as an article of merchandise.

e. Shibboleh. Ruth 2:2. Translated "ear of corn." What the word Shibboleh strictly means will appear from the following. In Gen. 41:5-7 we read of seven ears of corn or grain upon one stalk. The reading or the idea conveyed is incorrect. Instead of seven ears of grain on one stalk, it means and should read seven stalks each with its ear of grain, or grain-head, all proceeding from one seed grain. The writer has seen as many as forty-five separate stalks each with its one head of wheat produced by one seed grain. These stalks produced by the one seed grain taken together are still called and were anciently called *Shibboleh*.

Other terms are used to express "green corn," "old corn," etc.

Many of the above terms for corn are applied more frequently to other grains than to corn strictly.

COTTON. It is probable that the word *carpus* in Esth. 1:6 should be rendered *cotton* instead of "green."

CUCUMBER. Num. 11:5; Isa. 1:8. The *Cucumis* chate or Hairy Cucumber, but including also the Western species, *C. Sativus*.

CUMMIN. Isa. 28: 25, 27. An umbelliferous plant, cultivated for the sake of its seeds, which are often used as a spice.

FITCHES. Isa. 28:25, 27; Ezk. 4:9. In the passage from Isaiah the Hebrew word is *kesah*, which is doubtless the *Nigella sativa*, a small annual, cultivated in Egypt and Palestine for its seeds, which are black, and are used as a condiment. The Cummin has a slight case and needs but a slender rod to thresh it, while the harder pod of the Nigella requires to be threshed by a stouter staff, hence the statement in the passage. The word in Ez. 4:9 translated "fitches" should be rendered "spelt" as in margin.

FLAG. See Bulrush.

58

FLAX, LINEN, FINE LINEN. Ex. 9:31; Gen. 41:42. The cultivation and manufacture of flax goes back to the coverings of the oldest mummies of Egypt. And Pharaoh had Joseph arrayed in vestures of fine linen. As with the Egyptian priests so the Jewish priests were commanded to wear linen garments. The tabernacle curtains were embroidered upon the same material. Angelic beings seen by Ezekiel and Daniel appeared as if " clothed in linen," the emblematic garments of purity.

GALBANUM. Ex. 30:34. One of the perfumes employed in mixing the holy incense, the gum of which is produced from the *Galbanum officinale*, an umbelliferous plant.

GALL. See *Hemlock* under No. 1 this section.

GARLIC. Num. 11:5. The well-known vegetable akin to the Onion.

GOURD. Jonah 4:5-10. Some identify Jonah's gourd with the Castor Oil tree (*Ricinus communis*), and others with the Bottle Gourd (*Cucurbita pepo*). Palestine is remarkable for the variety of its cucumaceous vegetables, and for the great rapidity of their growth. In 2 Ki. 4:39 another word is translated "wild gourd," where the Colocynth seems to be the plant intended.

GRASS, HAY, STRAW. Several terms are used:

a. Yered. Num. 22:4. A general term, meaning simply that which is green,—herbage.

b. Deshey. Gen. 1:11. The word most exactly answering to grass, and also green in distinction from dry grass.

c. Haseer. Isa. 40:6, 7. The word is translated both "grass" and "hay." According to its usage the word refers to tall grass, and in a green state. d. Hashash. Isa. 5:24. Mistranslated "chaff." The word means dried, cut grass.

e. Tibn. Isa. 65:25. Is chopped straw.

f. Aur. Dan. 2:35; Mos. Psa. 1:4. Chaff.

g. Eseb. Psa. 104:14; 106:2. Herb when it refers to human food, and grass when it refers to animal food.

HERBS. See under Grass, etc.

Hyssop. Ex. 12:22; Lev. 14:4, 6, 51. Taking together all the passages in which the Hyssop is mentioned, and taking into consideration all the purposes for which the Hyssop was used, as these purposes are set forth in the Old Testament and the Mishna, and the only plant that answers to all this is the Caper plant (*Capparis spinosa*). The argument in favor of the Caper plant is further strengthened by the similarity of the Arabic name for Caper to the Hebrew name for Hyssop.

LADANUM. Gen. 37:25; 43:11. The Hebrew word lot occurs in the above two passages only, and is translated "myrrh." But lot is admitted by almost all critics to mean *Ladanum*, the gum or exudation of the *Cistus*, or Rock-rose, of which there are several species abundant in Palestine.

LEEKS. Num. 11:5. The Hebrew name is *haseer*, the word translated "grass" when it refers to animal food, and "herbs" when it refers to human food. The Leek is grass-like in leaf, form and color, and hence so called.

LENTILS. Gen. 25:34. The Hebrew and Arabic names correspond. The Lentil harvest is later than wheat, and is cut and threshed like other grains. The grain is small, light red or yellowish red disc. The taste is similar to our peas. A largely consumed article of food in the East.

LILY. Song of Songs 2:1, 2, etc. The Lily is of different kinds and colors, and probably different kinds are alluded to in those passages that speak of the Lily, as *e. g.* Song of Songs 4:5; 5:13; Hos. 14:5. The Lily was one of the designs round the rim of the brazen sea in the Temple of Solomon. The Lily was the type of purity and beauty.

LINEN, FINE LINEN. See Flax.

MALLOWS. Only in Job 30:4. The Revisers are doubtless correct in translating "Saltwort."

MANDRAKES. Gen. 30:14; Song of Songs 7:13. The Hebrew word is *dudaim*, meaning *love plants* or *love flowers*, and so I think it preferable to translate instead of "mandrakes." The translation "mandrakes" is not consistent with the statement made in The Song, while the translation "love flowers" is; for a number of the most fragrant flowers are taken by orientals as emblems of love, and called "love flowers."

MELONS. Num. 11:5. The Hebrew name is the same as the Arabic name which is still applied by the Egyptians to the Water Melon.

MILLET. Hebrew *dohan* is only once mentioned among the many ingredients which Ezekiel was commanded to take and mingle for his bread. Ez. 4:9. The Hebrew and corresponding Arabic word include the two species of Millet, the *Panicum Miliaceum* and *Sorghum vulgare*.

NETTLES. Two Hebrew words are so translated, *viz. a. Kimmosh.* Isa. 34:13. Is identified with the Sting-nettle or *Urtica Pilulifera*. b. Harul. Job 30:7. Possibly the Acanthus spinosus.

ONIONS. Num. 11:5. The Hebrew and Arabic name is *Basal*. The onion is so called as being *bulbous*.

PANNAG. Ezek. 27:17. The corresponding Arabic and Persian word is applied to the garden-hemp, whence comes the medicinal *Hyoscyamus* or *henbane*.

PAPER REEDS. See Bulrush.

PULSE. Dan. 1:12, 16. The Hebrew word means simply "seeds."

REED. See Bulrush.

ROSE, ROSE OF SHARON. Song of Songs 2:1 and Isa. 35:1. The Hebrew term is general. It means simply *a bulbous plant*; and for that very reason should not be rendered "rose." In view both of the meaning and the context it would be better in the above passage to translate "a bulbous plant."

RUSHES. See Bulrush.

RYE. Ex. 9:32. Identified as Spelt.

SAFFRON. Song of Songs 4:14. Is the Crocus. (Crocus sativus.)

SODOM, VINE OF. Deut. 32:32. Is probably the Colocynth. The fruit is nauseous, and when ripe full of dust.

SPELT. See Rye.

SPIKENARD, NARD. Song of Songs 1:12. An Indian plant. Imported into Palestine from a very early period. Prized both as a perfume and a medicine.

SWEET CANE. See Calamus.

STACTE. See under No. 1.

THISTLE. See Bramble.

THORN. See Bramble.

VINE OF SODOM. See Sodom just above.

62

WHEAT. Gen. 30:14. One of the blessings of the Promised Land. The wheat harvest one of the epochs of the year. Sown in November and December. Used also as a figure of speech.

WORMWOOD. Deut. 29:18. It belongs to the genus *Artemisia*. The word occurs frequently but always metaphorically, or as a comparison for that which is bitter or cruel.

XVII.-Zoology.

Out of Palestine's strangely-varied climate springs also a corresponding complexity in animal life as well as vegetable life. The animals of the Old Testament are here enumerated in accordance with their position in the animal kingdom.

1.-Mammals.

Mammals, or beasts have a twofold classification in Scripture:

a. As to their habits as "cattle," or domesticated animals, and "beasts of the field," or wild animals.

b. Ceremonially, with regard to their employment for sacrifice or food, they are divided into clean and unclean, the clean comprising those which divide the hoof and chew the cud, the unclean including all other quadrupeds.

Several Hebrew words are translated "beasts":

a. Behemah, the general term for cattle, sometimes also for quadrupeds, as opposed to fowls and creeping things, Gen. 7:2. It is also applied to beasts of burden, 1 Ki. 18:5. Sometimes applied to wild beasts, Deut. 32:24. b. Hayah, meaning a living thing, but more generally confined to carnivorous animals, "beasts of the field," Hos. 13:8.

c. Be'ir, i. e. pasturers or grazers, used only of domestic cattle or of beasts of burden, Num. 20:8.

The mammals mentioned in the Old Testament are:

APES. 1 Ki. 10:22; 2 Chron. 9:21. Mentioned only in these two passages, where they are spoken of as being imported by King Solomon from Tarshish.

Ass. Gen. 22:3. Three Hebrew words apply to the domesticated ass, as follows.

a. Hamor. A he ass. Gen. 12:16.

b. Athon. A she ass. Num. 22:21.

c. Ayir. A colt, or young ass. Judges 10:4.

Two words are used for the Wild Ass, viz.

a. Arod. Only in Job 39:5. Asinus vulgaris.

b. Pere. Job 39:6, 8. Asinus hemippus.

BADGER. Ex. 25:5. Not a badger or any land animal is meant, but a marine animal, either the porpoise or dugong; according both to the Hebrew and the cognate Arabic name. These animals are still found in the Red Sea as well as in the Mediterranean, and their skins are still used by the Arabs for the same purposes as mentioned in the Bible. On the other hand the Badger is rarely or never found in the wilderness. The skins of these marine animals were employed for the outer covering of the Tent of the Tabernacle (Ex. 26:14), and in wrapping up the holy things when they were moved (Num. 4:8, 10), while they are also mentioned as the material of the shoes of the prophetic impersonation of Jerusalem by Ezekiel (16:10). And the skins of these marine animals are still cut into sandals by the modern Arabs. Critics

are generally agreed that the skins of these marine animals are intended, and not Badgers' skins.

BAT. In Lev. 11:19 and Deut. 14:18 the Bat is spoken of as one of the fowls that may not be eaten. It is classed among fowls as being winged. It is however a mammal. The following verse of Leviticus speaks of it as among "fowls that creep, going upon all four." It is classed among fowls because it is winged, and the literal meaning of the Hebrew word for fowl is *winged*. But when the passage adds that it "creeps, going upon all four," the Scriptures thus recognize and properly classify the bat among mammals, so that the eminent zoölogist, Ray, was not the first one to classify the bat properly, according to a certain writer. Many species of bat are to be found in Palestine.

BEAR. 1 Sam. 17:34; Hos. 13:8. Owing to the clearance of timber the bear has been extirpated from Palestine, excepting some parts of Hermon and Lebanon. The Syrian bear is a distinct species, being somewhat smaller and of a paler color than the European Brown Bear. The ferocity of the Bear is used as a simile in Scripture.

BEAST. Several Hebrew words are translated "beast." Some of these, Behemah, Hayah and Be'ir, have been noticed in the early part of this section. The words *ziim* and *iyim* are also translated wild beast. The former word stands for some desert wild beast or beasts, while the latter word meaning "howlers," stands for jackals. Still another word has the meaning of "beast" throughout the Bible excepting in the Book of Job, *viz. Behemoth*, which is applied to

[5]

domestic cattle or any large quadruped, Gen. 6:7; Ex. 9:25. But

BEHEMOTH in Job 40:15–24 is a particular animal. From the description given in Job this particular animal is doubtless the Hippopotamus.

BOAR, WILD. Psa. 80:13. The Hebrew and similar Arabic term is applied alike to the Wild Boar and to the domesticated swine. Where it occurs in the Bible it usually refers to the tame animal, only in the above Psalm to the wild beast. The Wild Boar is still quite numerous in some parts of Palestine. The Mosaic law makes this animal unclean, because, though dividing the hoof, it does not chew the cud.

BULL, WILD. The Hebrew name is *To*. Found only in Deut. 14:5; Isa. 51:20. The true Wild Bull has another name, *Reem*, translated "unicorn," q. v. The *To* refers to some animal of the bovine or antelope class. Probably it is either the *Oryx*, or the *Bubale*, the "wild cow" of the Arabs. Permitted for food.

Gen. 12:16, etc. The Hebrew name is CAMEL. gamal, a name that has been preserved with scarcely any alteration in Arabic, Greek, and all modern languages. The camel with the single hump is meant. It was and is the most valuable of all animals to man in the East. Prohibited for food, because while it chews the cud, it does not divide the hoof, the division being only partial. At the present day however the flesh of the camel is eaten by all eastern nations. In two passages another Hebrew word Beker, Bikrah (the masculine and feminine forms of the same noun) occurs, and is translated Dromedary, Isa. 60:6; Jer. 2:23. The dromedary is not a different species, but only a choicer breed of camels;-the camel of swiftness.

66

CATTLE. Different Hebrew words express the different sexes, ages, and conditions of horned cattle, as follows:

a. Behemah, for beasts in general, often including other live stock besides horned cattle. Gen. 34:23.

b. Bakar, *i. e.* Cattle, Oxen; as a rule used collectively for a herd of cattle without distinction of age or sex. 1 Sam. 15:15. In Gen. 18:7 *Ben Bakar* = Calf.

c. Shov, i. e. An Ox, used for one head of cattle, without distinction of age or sex. Chaldee Tor.

d. Par, i. e. Bull, and Parah = Cow; generally for a young bull or Bullock, and for a Heifer or young cow offered in sacrifice.

e. Aiglah, a young cow or Heifer; one that has not been broken to the yoke. Hos. 4:16.

f. Abirim, i. e. "strong ones," occasionally used for bulls. Jer. 50:11.

Horned cattle were the most important animals in the agricultural economy of the Jews. They were employed in all the operations of husbandry, as numerous Scripture passages show. Especially important was their use in sacrifice. There are several provisions in the Mosaic law for the protection and tending of cattle. They enter into Scriptural figures of speech. In Hos. 14:2 the expression "the calves of our lips" means the sacrifice of our lips.

CHAMOIS. Only in Deut. 14:5. The Chamois is not a native of Bible lands. It is probably the wild sheep that is meant. The Hebrew word is *zemer*, and the precisely corresponding Arabic word is applied to any sheep or goat that has thin or scanty hair. Permitted for food. CONEY. Lev. 11:5. The *Hyrax syriacus* of naturalists. About the size of but otherwise unlike the rabbit. Prohibited as food. See Hare.

DOG. Less esteemed than at present. Used for guarding the flocks. Job 30:1. Used also as a term of abject humility in the figurative language of Scripture. 1 Sam. 17:43, etc.

DRAGON. Two distinct Hebrew words are thus translated viz. tannin (see Dragon under Reptiles) and tan, which is always used of some animal inhabiting the desert, probably the jackal, q. v.

DROMEDARY. See Camel above. The word *Recesh* translated "dromedaries" in Mic. 1:13, etc. means simply "swift beast" and refers to a horse of peculiar and noble breed. So also *Beni Rammak* in Est. 8:10 translated "young dromedaries" should be rendered "sons of mares."

ELEPHANT. 1 Ki. 10:22, where we have *shen habim*, *i. e.* "teeth of elephants." *Habba* is also applied to the elephant in the Assyrian inscriptions. The same name for the elephant is preserved in the vernacular languages of Malabar and Ceylon to this day. The earliest allusion to the use of ivory among the Jews is in David's time. Psa. 45:8.

FALLOW-DEER. Deut. 14:5. The roebuck. Permitted as food. Part of the daily supply for Solomon's table. 1 Ki. 4:23.

FERRET. In Lev. 11:30 should be rendered either lizard or gecko. Unclean.

Fox. Song of Songs 2:15. The Hebrew word *Shual* translated "fox" not only includes the jackal, but in most of the passages where it occurs, the jackal, rather than the fox, is intended. Another name *iyim*

is also specifically applied by the Hebrews to the jackal.

GAZELLE. Song of Songs 8:14. The Hebrew word for *gazelle* is *Sabi* or *Sabiyah*. It is mistranslated "roe" and "roebuck" in our versions. Noted for its beauty, grace and speed. Used as a love figure in The Song.

GOAT. Several terms are employed in the Hebrew:

a. Ez, which signifies the goat generically, whether he or she-goat.

b. Sapheer. An old he-goat. Dan. 8:5. Also in the later books of the Old Testament for a he-goat offered in sacrifice.

c. Saeer, i. e. "hairy," frequently used in the Pentateuch for a full-grown goat offered in sacrifice, but is generally employed to signify a kid.

d. Atood is the common word for the he-goat, which is the leader of the herd. Jer. 50:8.

e. Tayish, i. e. the he-goat as a butter or striker. Prov. 30:29.

Goats were used for food and sacrifice.

GOAT, WILD. Three Hebrew terms are used:

a. Yael, i. e. "the climber." The Ibex. Job 39:1.

b. Ako. Probably another name for the Ibex. Deut. 14:5.

c. Yaelah. The wild she-goat. Prov. 5:19.

GREYHOUND. Prov. 30:31. The Hebrew term is *zarzir* or *zarzir mathnayim*. In the above passage where alone it occurs this *zarzir* is named along with the lion, the he-goat, and a king, as one of the "four things which are comely in going." There is general dissatisfaction with the rendering "greyhound," and general uncertainty as to what other rendering to give it. In the midst of this uncertainty I prefer to follow the precisely corresponding Arabic term, and so apply it not to any animal, but to a certain bird, viz. the Starling, called in Arabic zurzur. The Starling moreover answers strikingly to the requirement as being one of those things that are comely in going; indeed is celebrated in that respect as Pliny himself writes in his Hist. Naturalis, x. 24. An eminent naturalist writes, "The congregations of Starlings are indeed very marvellous, and no less than the aerial evolutions of the flocks, chiefly before settling for the night, have attracted attention from early times. The extraordinary precision with which the crowd, often numbering several hundreds, not to say thousands, of birds, wheels, closes, opens out, rises and descends, as if the whole body were a single living thing—all these movements being executed without a note or cry being uttered—must be seen to be appreciated." It would be strange if in those things that are comely for going the winged kingdom should not be represented.

HARE. The Hebrew and Arabic names are similar, and there can be no doubt the hare is intended. It was forbidden as food to the Israelites because while it chews the cud, it does not divide the hoof. Lev. 11:6; Deut. 14:7. Strictly, however, the hare, like the Coney, is not a ruminant animal, with four stomachs, and chewing the cud, but a rodent, of the same class to which belong the rat, porcupine, etc. The belief that it chewed the cud arose from its habit of constantly grinding its teeth and moving its jaw, like the Coney, and as those animals do that ruminate or chew the cud. Moses speaks of animals according to appearances, and not with the precision of a comparative anatomist; just as the Bible speaks of sunrise and sunset instead of speaking of the earth's motion.

HART and HIND. Psa. 42:1; 2 Sam. 22:34. The Hebrew terms are *Ayal* and *Ayalah*, being simply the masculine and feminine forms of the same word, or the names given to the male and female deer. Either the fallow deer or the red deer is intended, probably the former. Permitted as food. Deut. 12:15. Used also figuratively, standing for swiftness, gentleness and affection.

HEDGEHOG OF PORCUPINE. The Hebrew word kippod in Isa, 14:23; 34:11 and Zeph. 2:14 is translated in the Authorized Version "bittern" and in the Revised Version "porcupine." The Revisers are doubtless correct. The corresponding Arabic word requires hedgehog or porcupine. The writer of Animals of the Bible in the By-paths of Bible Knowledge series seems to think that the context renders it impossible to translate hedgehog or porcupine. Evidently this writer has consulted the context of his Authorized Version and not the context of his Hebrew Bible, for the rendering "porcupine" is perfectly consistent with the context in the Hebrew Bible. For example, in Zeph. 2:14 the Revision reads "Both the pelican and the porcupine shall lodge in the chapiters thereof: their voice shall sing in the windows; desolation shall be in the thresholds." The above writer objects saying of the porcupine and hedgehog, "Neither of them sing, or climb up columns to build, or frequent pools of water." But the Hebrew Bible does not say so. The verb "shall sing" is singular and does not refer back to the pelican and porcupine or it would be plural. Moreover the word "their," i. e. "their voice shall sing," has no existence in the Hebrew, which simply says "A voice shall sing," etc. Again when the same writer objects as to the porcupine and hedgehog, that they do not frequent pools of water, in allusion to Isa. 14:23, he is again in error, as the writer of this has secured hedgehogs in the water along the shores of lakes.

HORSE. Several Hebrew terms are used, viz.

a. Soos. Generally applied to a chariot horse. Ezek. 27:14.

b. Parash. Is translated in our Version "horseman"; but it is generally agreed that this is incorrect and that the word denotes a cavalry or riding horse, in contrast to a chariot horse. Ezek. 27: 14; 1 Ki. 4:26.

c. Rekesh, translated in our Version "dromedary," really means a swift or high-bred horse. 1 Ki. 4:28.

d. Rammak, means a mare. Esth. 8:10.

The first mention of the horse in Scripture is in Gen. 47:17. The horse is scarcely ever spoken of in the Bible except in connection with war and armies. The exception is Isa. 28:28. All this is to be reversed in that future of peace according to Zech. 14:20. Note description in Job 39:19–25.

HVENA. In Jer. 12:9 the Hebrew word sabuce is translated "speckled bird." The word means *streaked* and there is little doubt but that it refers to the hyena, as most writers are agreed. So in 1 Sam. 12:18 the proper name Zeboim means the valley of hyenas.

JACKAL. See Fox and Dragon above.

LEOPARD. Mentioned seven times in the Old Testament. Its swiftness, cunning, perseverance and strength are spoken of. It is taken as a type of fierceness, when in the coming time of the reign of Christ

72

"the leopard shall lie down with the kid." Isa. 11:6.

LION. Mentioned about one hundred and thirty times in the Bible. There are several terms used in the Hebrew, *viz*.

a. Aryeh. The general term for a lion. Gen. 49:9.b. Kepheer. A young lion. Judg. 14:5.

c. Labi and fem. Labiyah. A full grown lion and lioness.

d. Laisch. An old lion; and poetic name for lion. Prov. 30: 30.

e. Goor. A whelp. Gen. 49:9. Not of the lion exclusively.

f. Shahas. Used twice and only in Job. 28:8; 41:34. In the former passage it is translated "lion's whelps" and in the latter "children of pride." The term means "to cast a shadow," and refers to all objects, animals and others that cast a shadow; and to so render it is in agreement with the context and the Arabic.

g. Shahal. Also in Job 28:8 where it is again rendered "lion." The word means "the brayer," and the precisely corresponding Arabic word, *Sahal*, is one of the names applied to the wild ass of the desert, and so should be rendered wild ass or wild beast.

MOLE. Two Hebrew words are translated "mole," viz.

a. Tinshemeth. Lev. 11:30. Probably a lizard. See Chameleon.

b. Hephor Peroth. Isa. 2:20. The Hebrew word indicates some burrowing animal. Probably it is better to render the term general—the burrowers. The mole is not found in Palestine. MOUSE. Lev. 11:29. The term is doubtless generic, including other rodents, especially the jerboa and field mice.

MULE. *Pered*, fem. *Pirdah.* 2 Sam. 18:9. Not mentioned till the time of David. *Rekesh* in Esth. 8:14 should be Dromedary.

PORCUPINE. See *Hedgehog*.

PYGARG. Deut. 14:4. Probably the Antelope addax. Permitted for food.

ROE, ROEBUCK. Deut. 14:5; Song of Songs 2:9. Hebrew Sabi, Sabiyah, should be translated gazelle, which see. Permitted for food.

SATYRS. Isa. 13:21. The Hebrew word is Seirim, meaning hairy ones, the same name for goats. The Revised Version renders it "he-goats" in Lev. 17:7 and has "he-goats" in the margin for "satyrs" in the text of Isa. 13:21. The Authorized Version of Lev. 17:7 has "devils." According to this same passage the term denotes an object of heathen worship or a demon dwelling in the deserts. The worship of the goat, accompanied by the foulest rites, prevailed at Mendes in Lower Egypt, and the Israelites may have fallen into the same snare while they dwelt in Egypt; a case similar to Jeroboam's calf-worship later.

SHEEP. Several terms are used in Hebrew, viz.

a. Sone. A flock of sheep.

b. Seh. A single sheep or goat.

c. Ayil. A ram.

d. Rakal. An ewe.

e. Kebes, fem. Kebesah. A young sheep of over a year.

f. Taleh. A sucking lamb.

g. Kar. A lamb in pasture.

The sheep is the first animal distinguished by name in the Bible. Gen. 4:4. It is perhaps the most important of all the animals in the Scriptures:—consisting of the chief wealth of the patriarchs; the chief animal food; while its wool supplied almost the entire clothing of those days. The sheep was preëminently the animal of sacrifice. The milk also was extensively used. From the sheep and from the shepherd life we have some of the most powerful illustrations of Scripture. Isa. Ch. 53.

SWINE. See Boar, Wild.

UNICORN. Num. 23:22, etc. The Hebrew word is *Reem.* By means of the Assyrian bas-reliefs, it is shown that the *reem* was a species of wild ox, now extinct in Palestine, but which used to be hunted by the Assyrian monarchs. One of the animals is sculptured with the name, *Reem*, written above it in cuneiform characters. This animal is the Aurochs, the *Bos primigenius* of naturalists, the wild ox closely corresponding to the Bison, the other species of the two great species of wild bovine animals.

WEASEL. The word only occurs in the list of unclean creeping things in Lev. 11:29. The Hebrew word is *Holed*. The blind rat or mole rat is still so called in Palestine.

WHALE. This is in a few passages in our version the translation of the Hebrew *tannin*, *i. e.* "sea-monster." (See Dragon, Leviathan, Fish.) *Tannin* is usually rendered Daragon, q. v.; but the word does not always necessarily imply a sea-monster, *e. g.* Deut. 32:33. The whale tribe is included, but not exclusively or specifically denoted by *tannin*. One passage in particular is to be noted, Lam. 4:3, where we read "Even the sea-monsters (tanninim) draw out the breast, they give suck to their young ones." In this passage the prophet exhibits a knowledge of the habits of the whale tribe, which proves his familiarity with some species, at least, of these marine mammals. It is well-known that the whales, grampuses, porpoises, and dolphins, are not fishes, but air-breathing mammals, adapted to an aquatic life, which bring forth their young alive and suckle them. The whale of the prophet Jonah was probably a shark. See *Fish*.

WOLF. Gen. 49:27. Still called by its Bible name. Emblem of ferocity.

2.-Birds.

In the narrative of the creation in Genesis birds are represented as being brought into existence on the fifth day, after sea-monsters and fishes, and before mammals. This is in accordance with the geological chronology of their appearance. Moreover the birds are stated to have been created from the waters, and not like the mammals, from the earth. In the then condition of the world, the aquatic birds would doubtless be the first class to predominate. Bird remains are found where quadrupeds were not yet known. Besides in their natural economy birds have some marked affinities with the fishes and reptiles, as e. g. in their being produced from eggs instead of being brought forth alive. See Gen. 1:20, 21, 23.

The Mosaic law divides birds into two classes, so far as food was concerned, the clean and the unclean. Lev. 11:13–19; Deut. 14:11–20. The unclean included all birds of prey, and carrion, and fish-feeders. As to the passerine birds, game and poultry groups, the duck tribe, and most of the waders, excepting only the Herons and Storks, there was no restriction.

The Mosaic law contained also a number of merciful enactments in respect to birds, *e. g.* Deut. 22:6, 7.

The habits of birds are frequently alluded to in Scripture, e. g. Song of Songs 2:11, 12; Jer. 8:7, etc. They are also used repeatedly to illustrate Scripture truth, e. g. Prov. 27:8; Hos. 9:11; Ex. 19:4; Deut. 32:11, 12, etc.

The Birds of the Old Testament are as follows:

BAT. See Bat under Mammals.

BIRD. Several words are translated "bird" in the Old Testament.

a. Oph. Gen. 1:20. Oph is the commonest Hebrew term, and is used collectively for all kinds of birds, as flying things.

b. Sippor. Psa. 84:3. This word occurs over forty times in the Old Testament. It is frequently translated "fowl"; sometimes it is translated "bird"; in two passages it is rendered "sparrow," q. v. The name is evidently generic, not denoting any species especially, but, like the corresponding Arabic word, applied to all the varieties of small passerine birds. In no temperate country of the same extent are the passerine birds more numerous than in Palestine. There is no prohibition in the Levitical law against the use of any of the small birds as food.

BITTERN. Hebrew *Kippod*. See Hedgehog under Mammals.

CORMORANT. Mentioned only in two places, Lev. 11:17; Deut. 14:17, where it is included among unclean birds. The Hebrew name *shalak* denotes a diving or plunging bird, which the cormorant certainly is. The Hebrew word *kaath* translated cormorant in two passages in our Version, signifies really the Pelican, q. v. The passages are Isa. 34:11; Zeph. 2:14.

CRANE. In Isa. 38:14 the Authorized Version reads "Like a crane, or a swallow, so did I chatter," while the Revised Version reads "Like a swallow or a crane, so did I chatter." That is, the R. V. correctly transposes the birds, and rightly reads *agur* for crane and *sus* for swallow. (See Swallow.) The same correction is to be made in Jer. 8:7, the Hebrew *agur* meaning crane.

CUCKOO. Lev. 11:16; Deut. 14:15. The Hebrew is *Shahaf*. Probably some species of sea-gull is intended instead of the Cuckoo. Many species of seagull are common on the coasts and on the Sea of Galilee.

DOVE-PIGEON, Hebrew Yonah; Turtle, Hebrew Tor; Turtle-Dove, Hebrew Tor-Yonah. The dove is mentioned more than fifty times in the Bible. No bird is more frequently mentioned. While the Jews distinguished the pigeon or dove from the turtle-dove, they were perfectly aware of their natural affinity. The first mention of the dove is in Gen. 8:8–12. Before the giving of the law it was used in sacrifice by Abram, Gen. 15:9. According to the Mosaic law the pigeon and turtle-dove were the only birds enjoined to be offered in sacrifice, Lev. 1:15; 5:7; 14:22; 15:14, 29; Num. 6:10; Lev. 12:8. The dove was held as the symbol of love, pureness and innocence.

EAGLE. The Hebrew term is *nesher*, and the Arabic *niser*. *Nesher* is invariably translated "eagle" in the Bible. It is generally agreed, however, and very obvious from some passages of Scripture, that the word may be more specifically rendered vulture, or griffon vulture, or great vulture, e. g. Mic. 1:16. The corresponding Arabic *niser* is applied not to any eagle strictly so-called, but to the Griffon of naturalists commonly known as the Griffon or Great Vulture. A number of passages where *nesher* is used can be applied to the Griffon alone. The Hebrew word coming from a root meaning to tear with the beak, signifies to make bald the back part of the head, very applicable to the Griffon and not to the eagle. Eagles do not congregate like the Griffon to feed on dead flesh. Prov. 30:17; Matt. 24:28. Psa. 103:5 does not refer to the moulting of the eagle or griffon, but to their longevity, which is noted: "Thy youth is renewed, so that in point of strength thou art like the eagle." This strength is alluded to in various prophetical writings. Isa. 40:31, etc. Job accurately describes the habits of the Griffon, 39:27-30. The eagle or griffon is used emblematically in Ezk. 1:10; and is employed as an illustration of divine care, Deut. 32:11, 12; Ex. 19:4. Gier Eagle. See below.

FowL. The Hebrew term 'Ayit, translated "fowl," comes from a root meaning to attack vehemently. It is a collective term, applied exclusively to birds of prey. It occurs three times,—Gen. 15:11; Job 28:7; Isa. 18:6. The passage from Job is the more forcible when it is remembered that the vulture can detect the path of a wounded deer from a height where it can itself be seen by no human eye.

GIER EAGLE. Lev. 11:18; Deut. 14:17. The Hebrew name is *Raham*. It is generally agreed that the bird meant is the Egyptian Vulture, the *Neophron perenopterus* of naturalists. This bird is still so called in Egypt, where it is quite common. In this connection one passage is especially to be noted, viz. Judges 5:30, where we read, "Have they not sped ? have they not divided the prey; to every man a damsel or two." And the Revised Version reads it, "Have they not found, have they not divided the spoil? a damsel, two damsels to every man." The word or words for damsel is raham, precisely the name for vulture, and should be translated *vulture* in this passage and not "damsel," a meaning the word never has. This is not only intimated and confirmed by the Arabic, but also by the usages of the Old Egyptians. With the Old Egyptians the vulture with outspread wings was the emblem of that deity who protected the kings while they made their offerings to the gods in the temples, and more especially when the king and his warriors waged war with an enemy in the field of battle. A head-dress representing a vulture was also worn by some instead of a cap, the vulture heads projecting from the foreheads of the individuals, while the wings fell downwards on either side of the neck. Moreover the name for vulture in the Old Egyptian was *uran*, which means victory. All this is strikingly confirmatory and explanatory of the rendering in the passage Judges 5:30 as a part of the history of the defeat of Sisera.

GLEDE. Only in Deut. 14:13 among the unclean birds of prey. Probably the Buzzard is intended. Hebrew *Raah*.

GREAT OWL. See Owl.

HAWK. Lev. 11:16; Deut. 14:15. The Hebrew term is *Nais*, a generic term which includes all the smaller birds of prey when followed by the expression

80

"after his kind." The variety of the hawk tribe is large. Job 39:26 refers to their migratory habits.

HERON. Lev. 11: 19; Deut. 14: 17. Hebrew anafa. It is a generic term as shown by the expression "after her kind" following. The generic term includes herons, bitterns, storks, spoonbills, ibises, flamingos, etc. There are about fourteen species of these birds to be found in the marshes of Palestine.

KITE. Heb. Ayyah; an unclean bird. Mentioned in three passages, Lev. 11:14; Deut. 14:13; Job. 28:7. Another generic term including the Kite, the short toed eagle, etc.

LAPWING. Another unclean bird, Lev. 11: 19; Deut. 14:18. The Heb. is *dukifath*. The bird intended is probably the *Hoopoe*.

NIGHT HAWK. Only in Lev. 11:16; Deut. 14:15 among the unclean birds. Probably some species of owl.

OSPREY. Only in Lev. 11:13; Deut. 14:12 among unclean birds. Includes the osprey or fish-eating eagle and short-toed eagle.

OSSIFRAGE. Heb. *Peres, i. e. the breaker*. The bird intended is doubtless the Lammer-Geier or Bearded Vulture, which drops its prey to break the bone or shell. Lev. 11:13; Deut. 14:12.

OSTRICH. The Hebrew word bath-hayyanah or yaanah is the usual word for ostrich in the Bible. Lam. 4:3. In some other passages the same word is rendered owl when it should read ostrich, e. g. Isa. 34: 13. Another word, ranan, is rendered "peacock" in Job 39:13 where it also should be ostrich, there being another word for peacock. The habits of the ostrich are alluded to a number of times in the Bible by way of illustration.

[6]

OWL. Several words are translated "ewl," and several kinds of owl are mentioned in the Old Testament.

a. Beth-hayyanah. Translated "owl," should be rendered ostrich. See above.

b. Yanshoof. The Great Owl, the same as the Egyptian eagle-owl. Lev. 11:17; Isa. 34:11.

c. Kippoz. Another species of Great Owl. Isa. 34:15.

d. Kos. The Little Owl. Athene persica. Psa. 102:6.

e. Lilith. Only in Isa. 34:14. The Screech Owl. Note the repeated connection of the owl with the desolation of Edom in Isa. 34, thus this and the two species of Great Owl above. And the owl is abundant in Edom.

PARTRIDGE. Mentioned twice. 1 Sam. 26:20; Jer. 17:11. Probably includes the two kinds of Palestinian partridge and the Sand Grouse.

PEACOCK 1 Ki. 10:20. The Hebrew word for peacock, *tukkiyyim*, is of Tamil origin; still in use as a name for the peacock on the Malabar coast of India and Ceylon. The peacock was imported by Solomon. The word in Job 39:13 translated "peacock" should be ostrich, q. v.

PELICAN. In Lev. 11:18; Deut. 14:17 an unclean bird. Emblem of Edom's desolation and ruin. Isa. 34:11.

QUAIL. Mentioned in the Bible only in connection with the miraculous supply of food which they formed for the Israelites upon two occasions in the wilderness. Ex. 16:11–13. Psa. 78:27. The Common Quail is intended, and is still called in Arabic by its Hebrew name. RAVEN. The Raven is the first bird specified by name in the Bible, Gen. 8:7. The term however is generic in the prohibition of Lev. 11:15; Deut. 14:14, and includes the whole family of the Crow tribe, crows, rooks, jackdaws, etc. Its Hebrew name *oreb* means *dark*, *black*, Song of Songs 5:11. Emblem of Edom's desolation, Isa. 34:11. Illustrates God's goodness and care, Job 38:41; Psa. 147:9.

SPARROW. See Sippor under Bird. In addition to what was said there where the word is generic, there are a few definite allusions to a particular species, e. g. Psa. 102:7, where the Blue Thrush may be intended. In Psa. 84:3 the common House Sparrow is probably meant.

STARLING. See Greyhound under Mammals.

STORK. The Hebrew name Hasidah means kindness. The Stork has in all ages been held to be the type and emblem of maternal and filial affection. Greek and Latin authors repeatedly speak of the same. Prohibited for food, Lev. 11:9. The quill feathers of the wing are deep black, the rest of the plumage pure white. See Job 39:13; Zech. 5:9. Its migratory habits alluded to in Jer. 8:7.

SWALLOW. Two terms are used:

a. Deror. Psa. 84:3. The swallow proper.

b. Sus. Isa. 38:14. The Swift. See Crane.

SWAN. Lev. 11:18; Deut. 14:16. According to some the *Sacred Ibis*, and to others the Wild Duck.

TURTLE DOVE. See Dove.

VULTURE. Lev. 11:14; Isa. 34:15. The Black Kite. The bird is still so called, *viz.* Hebrew *dayah*, Arabic *hadayah*.

3.-Reptiles.

ADDER. Four Hebrew words are translated "Adder" in our Version, *viz.*:

a. Shefifone. Mentioned only once, Gen. 49:17, where it speaks of Dan being like "an adder in the path, that biteth the horse's heels, so that his rider shall fall backward." This statement, or peculiarity, identifies the *shefifone* or adder at once with the Horned Snake. It is still called *shefone* in Arabic. This species is said to have been the Asp with which Cleopatra killed herself.

b. Pethen. Is translated "adder," but should be Asp, q. v.

c. Akshub. Occurs once, Psa. 140:3, where it also is translated "adder." According to the corresponding Arabic probably a generic name for viper, and so called because it goes backwards and sideways in its gait.

d. Sif'oni. Translated "adder" in Prov. 23:32. See *Cockatrice.*

ASP. The Hebrew word which occurs six times is *pethen*, Deut. 32:33; Isa. 11:8, etc. The Pethen is the Egyptian Cobra. With the Old Egyptians it was the distinctive badge of royalty, the type of dominion, affixed to the head-dress of the Egyptian monarchs.

CHAMELEON. Hebrew *Kowah*. Occurs only once in Lev. 11:30 among unclean things. Supposed by some to refer instead to the Nilotic Monitor, an immense lizard, attaining a length of four or five feet, and common in Egypt and the Sinaitic Peninsula.

COCKATRICE. Hebrew Sif'oni. Occurs five times; once translated "adder," Prov. 23:32. The Yellow Viper may possibly be intended. Isa, 11:8.

84

DRAGON. There are two Hebrew words, tan and tannin. Tan is always used of some animal inhabiting desert places. See Dragon and Jackal under Mammals. Tannin is generally used of aquatic monsters. See Whale under Mammals, and Leviathan later under this head. But in some passages tannin is used for huge land reptiles, e. g. Psa. 91:13.

FERRET. Lev. 11:30. Probably the Common Gecko.

FROG. The translation is undoubted. Frogs are only mentioned in the Old Testament, in the history of the second plague of Egypt, Ex. Ch. 8, and when that event is referred to, Psa. 78:45; 105:30.

LEVIATHAN. Occurs five times in the Old Testament. In Psa. 104:25, 26 used generically. In Job Ch. 41 it undoubtedly refers to the Crocodile.

LIZARD. The Hebrew *Letaah* translated "lizard" occurs only in Lev. 11:30, and there is no doubt about the correctness of the translation.

SERPENT. Two or three Hebrew terms are to be noted:

a. Nahash. A general term for the Serpent Tribe. Gen. 3:1.

b. Saraph. Translated "Fiery Serpents." Num. 21:6, 8; Deut. 8:15. The name plainly refers to the bite of some species of desert serpent, but what species is unknown.

c. Saraph Meofaif, i. e. Fiery flying serpent. Isa. 14:29. May possibly refer to those sand serpents that dart and spring with swiftness in the desert.

SNAIL. Lev. 11:30. Hebrew *homet*. The Sand Lizard. In Psa. 58:8 *Shablul* is properly translated "snail." TORTOISE. Lev. 11:29. Hebrew Sab. A large lizard; the Uromastix Spinipes.

VIPER. Hebrew *Epheh*. Occurs three times, Job 20:16; Isa. 30:6; 59:5. Always translated "viper." A venemous serpent. Probably a small poisonous snake common in the Sahara and still so called.

4.-Fish.

The following facts are to be noted under this head:

a. The creation of fishes falls on the same day with marine monsters, reptiles and birds; and it is to be observed that all these classes of the earlier creation, excepting whales, are oviparous, bring forth their young from eggs or spawn, while the creation of the following, sixth day, is of mammalia, or milk-giving animals, which bring forth their young alive.

b. No particular species of fish is directly mentioned in the Bible. The only distinction made between kinds of fish is that in Lev. 11: 9–12, between those that have fins and scales, which were permitted for food, and those that have no fins or scales which were prohibited as food.

c. The Hebrews early noticed the wonderful fecundity of fishes. Jacob in blessing the sons of Joseph is made to say "Let them grow into a multitude in the midst of the earth." But strictly, according to the Hebrew, what Jacob said was "Let them grow as fishes do increase." Gen. 48:16.

d. The fishes of the coasts of Palestine are those of the Mediterranean generally, with Mullets abounding, Porpoises and Dolphins common, Sharks occasional. The Nile, lakes and canals of Egypt abound in fishes of many species, and frequently alluded to in Scripture. Forbidden to the Egyptian priests, fish formed a most important part of the food of the rest of the people. Hence the force of the plague when the waters were turned to blood, and also the force of Isa. 19:8 and Num, 11:5. The commonest fishes of Egypt belong to the Bream, Perch, and Carp tribes. The fishes of the Sea of Galilee, the Jordan and its affluents are similar to those of the Nile. They abound in the Sea of Galilee. Of the affluents of the Jordan they especially abound in the Jabbok, an eastern affluent. The fish of the western streams of Palestine, those flowing into the Mediterranean, are less numerous. Of course no fish survives in the Dead Sea. Those entering the Dead Sea are soon stupefied and seen floating upturned and dead. Hence, in the mystic vision of Ezekiel, no more forcible illustration of an entire regeneration of the land by the waters of life could be given than a description of these waters of death peopled by living things. Ezek. 47:10. An artificial preservation of fish seems to be alluded to in Song of Songs 7:4; Isa. 19:10.

e. From the port of Joppa, and from the Phœnicians, Jerusalem was systematically supplied with fish. Neh. 3:3; 13:16. The Phœnicians were always the chief fishermen of the Syrian coasts. The Hebrew name Sidon means fishing-place. This was the earliest and chiefest industry of the Sidonians. Similarly Tyre, Ezek. 26:5; Neh. 13:16. The inland fishery of the Sea of Galilee must have been of considerable commercial importance in both Old and New Testament times.

f. Several methods of fishing obtained. The Sea of Galilee was fished principally by means of the draw-

net, or seine; a large net leaded and buoyed, carried out by a boat, cast, and then drawn in in a circle enclosing the fish. Isa. 19:8; Hab. 1:15. The casting net was also commonly used. The hook and line were also used in taking fish. Isa. 19:8; Job 41:1; Ezek. 29:4. In the smaller streams the spear was also much used in fishing. Job 41:7.

g. Among the unclean fishes, the Jews especially named the Cuttle-fish, not however a fish but a mollusc. This fish is perhaps spoken of in Ezek. 29:4. More likely the allusion is to the Sucking-fish.

h. Jonah's fish was probably one of the Shark species, though no description is given us of the particular fish.

i. The worship of fish was prevalent among many nations of antiquity, and such idolatry is expressly prohibited, Deut. 4:18. Among the Philistines the fish god was the national deity, viz. Dagon. To this deity were erected temples at Gaza and Ashdod. 1 Sam. 5:4.

5.—Invertebrate and Articulated Animals.

ANT. Mentioned twice in the Old Testament, both times in the Book of Proverbs where it is cited as an example of industry, Prov. 6:6–8, and a model of wisdom, Prov. 30:24, 25.

BEE. While honey is frequently mentioned in Scripture, bees are mentioned directly only four times, *viz.* Deut. 1:44; Psa. 118:12; Judges 14:8; Isa. 7:18.

BEETLE. The Hebrew is *hargol* which occurs only in Lev. 11:22 as one of the "flying creeping things that goeth upon all four, which have legs above their feet, to leap withal upon the earth." The beetle does not leap, but from the description, and from the fact that it was permitted as food, it is probable that some species of Locust was intended.

BALD LOCUST. See Locust.

CANKERWORM. See Locust.

CATERPILLAR. See Locust.

CORAL. Hebrew *Ramoth.* Job 28:18; Ezk. 27:16. Coral is the name given to the strong skeletons of polypes of numerous species, giving different forms and shapes to the mass. Found in the Red Sea, the Persian Gulf and the Mediterranean. Highly prized by the ancients.

CRIMSON-WORM. The Hebrew *tolaath*, meaning the crimson-worm is always translated in our Version by "crimson" (Isa. 1:18) or by "scarlet" elsewhere, as in many passages in Exodus, describing the colors used in draping the tabernacle; in Lam. 4:5 and Neh. 2:3, the word "worm" being omitted, as in most passages the dye obtained from it, and not the worm itself is intended. The animal is the *cochineal*.

FLEA. Is mentioned only twice in Scripture, viz. 1 Sam. 24:14; 26:20.

FLY. Two Hebrew words are so translated, viz.:

a. Arob, which occurs only in the narrative of the plague of flies in Egypt (Ex. Ch. 8), and in reference to that plague in the Psalms (78:45; 105:41). A particular species of fly is probably intended, but what species is uncertain.

b. Zebub, occurs only twice, Eccles. 10:1; Isa. 7:18. The first passage seems to refer to the common fly, but the second to a species of gad-fly.

GRASSHOPPER. See Locust.

HORNET. Mentioned three times in the Old Testa-

ment, and in each case as a weapon in the hands of the Lord against the Canaanites. Ex. 23:28; Deut. 7:20; Josh. 24:12.

HORSELEECH. Only in Prov. 30:15. The Hebrew and Arabic name means to adhere, as expressive of the bloodthirsty propensity of the Leech.

LICE. Mentioned only in passages referring to the third great plague of Egypt. Ex. 8:16–18; Psa. 105:31. The translation is undoubtedly correct.

A number of different words are em-LOCUST. ployed in the Old Testament to denote the Locust and the four different stages of existence through which the Locust passes. Thus the palmerworm, cankerworm and caterpillar in the first chapter of Joel do not mean different insects, but refer entirely to the Locust in its different stages of existence; and the terribleness of the judgment there described consists in the fact that the Locust in one stage had no sooner ceased than the Locust in another stage took up and carried on the work of destruction, and so on, thus prolonging the judgment and completing the destruction of the year's. Joel also furnishes us in the second chapter harvests. of his prophecy the most graphic and accurate description of an insect and an army of insects ever penned. The four different stages of the Locust are-the egg, the larva, the pupa, the imago or perfect insect. The Locust has no chrysalis or dormant state, being indeed more voracious in the pupa than in any other state. There is a general twofold division of Locusts, viz. the Runners, unclean under the Mosaic law, and the Leapers, which were permitted as food. Lev. 11:22. The different Hebrew words denoting the Locust are as follows:

90

a. Arbeh is the commonest name for locust, and occurs over twenty times. It is the word used in the eighth plague of Egypt. In four passages it is incorrectly translated grasshopper, viz. Judg. 6:5; 7:12; Job 39:20; Jer. 46:23.

b. Gazam in Joel 1:4; 2:25 and translated "palmerworm." It probably denotes the locust in the larva state, before its wings are grown, in which condition it is not less destructive.

c. Yelek in Joel 1:4; 2:25 and translated "cankerworm." It probably denotes the locust larva or caterpillar state or else in the pupa state. Nah. 3:15, 16.

d. Haseel. Joel 1:4; 2:25 and translated "caterpillar," denotes the locust in the pupa or imago state. It is to be noted in respect to all the above that after the winged locust has left, the young larvæ appear again, and consume all that has escaped the former. Psa. 105:34.

e. Salam, i. e. Bald Locust, only in Lev. 11:22, where the description shows it to be a species of Locust. The particular locust meant is probably the genus *Truxalis*, very common in the Holy Land, and which has a long, narrow, smooth head, and straight, swordshaped antennæ.

f. Hargol, only in Lev. 11:22, where it is translated "Beetle," but from the description given of it, as one of the clean animals allowed for food, it must be a species of locust instead of beetle.

g. Hagab, rendered "grasshopper" in Lev. 11:22, but "locust" in 2 Chron. 7:13.

h. Selasal. Deut. 28:42. Precisely what species is meant is uncertain.

i. Gob. Isa. 33:4. Undetermined as to what species or state of the locust is intended.

MOTH. Job 4:19; Isa. 50:9. With a single exception, every mention of the moth in the Bible refers to the destruction it causes in clothing, and so there can be no doubt but that the larvæ of the little Clothes' Moth is meant.

ONVCHA. The Hebrew *Shehaleth* occurs once in Ex. 30: 34, as one of the ingredients in the holy perfume of the Tabernacle. The *onycha* is the horny operculum or shield attached to the foot of many shell-fish, by which they close the aperture of their shell when they have withdrawn within it. From the opercula the perfume was collected. When burned it has a strong, pungent smell, and is still used in the composition of some kind of frankincense in the East.

PURPLE. The name of a valuable dye obtained from shell-fish on the coasts of the Mediterranean. The coloring matter was extracted from a small vessel in the throat of the animal, each shell yielding only a single drop, after which the whole fish was crushed to procure an inferior dye.

SCORPION. Deut. 8:15. The translation is undoubted. Referred to a number of times by way of illustration.

SNAIL. The word *Homet* translated "snail" in Lev. 11:30 should be *lizard*. The word *shablul* in Psa. 58:8 is properly rendered "snail."

SPIDER. Two words are so translated, viz.:

a. Akkabish in Job. 8:14 and Isa. 59:5, where the word is correctly rendered "spider."

b. Semamith in Prov. 30:28, where the gecko, a species of lizard, is probably intended.

WORM. Three Hebrew words are translated "worm," viz.:

a. Sas, only in Isa. 51:8, where it evidently denotes the caterpillar of the clothes' moth.

b. Rimmah. The translation is undoubted. The word is frequently used of the worms or larvæ that feed on dead bodies. Job. 17:14; 24:20.

c. Toleah. Applies to worms, Isa. 14:11, and to caterpillars, Deut. 28:39.

TOPOGRAPHICAL GEOGRAPHY.

XVIII.-General Topography.

The location of eities, towns and villages will alone be indicated under this head, as divisions, districts, mountains, valleys, rivers, lakes, fountains, etc., of the Holy Land have been considered under Political and Physical Geography.

In the Old and New Testament and in the Apoerypha, the names of 840 places in the Holy Land are mentioned. Of these 840 places something over 500 sites have been recovered and identified either with certainty or with great probability.

These sites that have thus far been recovered and identified, are, with perhaps a few exceptions, catalogued in this section, in alphabetical order, and the precise location is indicated by initial letters. Thus N. = north, S. = south, E. = east, W. = west, C. = central, B. = border, while the initial letter of each of thetribes of Israel indicates the geographical territory of that tribe, so that J. = Judah and $M. W. \frac{1}{2} = Manas$ seh's territory west of the Jordan, and Achizib A. W.C. B. means that Achzib is to be found in Asher, western part, central and on the border. With each placeis given one of the passages of Scripture wherein thatplace is mentioned.

$$-A-$$

Abdon. A. C. Josh. 21:30. Abel Beth Maacha or Abel Maim. N. N. C. 2 Sam. 20:15. Abel Meholah. I. S. E. 1 Ki. 4:12. Abel Shittim or Shittim, G. S. W. B. Num, 25:1. Abez. I. N. W. Josh. 19:20. Accho. A. W. C. B. Judg. 1:31. Achshaph. A. N. E. B. Josh. 19:25. Achzib. Josh. 15:44. See Chezib. Achzib. A. W. C. B. Josh. 19:29. Adadah. S. W. C. Josh. 15:22. Adam. M. W. 1 or I. S. E. Josh. 3:16. Adamah. N. S. C. Josh. 19:36. Adami. N. S. Josh. 19:33. Admah see Adam. Adoraim, J. C. 2 Chron, 11:9. Adullam, J. C. Josh, 12:15. Adummim. B. S. B. Josh. 15:7. Ahlab. N. C. Judg. 1:31. Ai. B. N. C. Josh. 12:9. Aijalon or Ajalon. D. S. E. Josh. 19:42. Ain. Josh. 15:32. See En Rimmon. Akrabbim, Mountains. Alemeth. B. C. 1 Chron. 6:60. Allon Bachuth. B. C. Gen. 35:8.

94

-95

- Almon. See Alemeth.
- Aloth. A. C. 1 Ki. 4:16.
- Amad. A. S. E. B. Josh. 19:26.
- Amana. Mountains.
- Anab. J. C. Josh. 15: 50.
- Anaharath. I. N. C. Josh. 19:19.
- Ananiah. B. W. Neh. 11:32.
- Anathoth. B. S. C. Josh. 21:18.
- Anem. I. W. or S. W. 1 Chron. 6:73.
- Aner. I. S. W. 1 Chron. 6:70.
- Anim. J. S. E. Josh. 15:50.
- Aphek. N. W. slope of Lebanon. Josh. 13:4.
- Aphek. J. N. W. 1 Sam. 4:1.
- Aphek. I. C. 1 Sam. 29:1.
- Aphek. M. E. 1. W. B. 1 Ki. 20:26.
- 2 Apheks unknown. Josh. 12:18; 19:30.
- Ar, Ar Moab and Rabbath Moab in Moab S. of R. Isa. 15: 1.
- Arab. J. S. E. Josh. 15: 52.
- Arad. S. N. Josh. 12:14.
- Archi. B. N. W. B. Josh. 16:2.
- Argob. District in M. E. $\frac{1}{2}$.
- Arnon. River R. S.
- Aroer. R. S. Deut. 2:36.
- Aroer. G. S. W. (?) Num. 32:34.
- Aroer. S. N. E. C. 1 Sam. 30:28.
- Arubboth. District. J. N. C. 1 Ki. 4:10.
- Ashdod. J. N. W. Josh. 11:22.
- Ashdoth Pisgah. Springs. R. N. C. Deut. 3:17.
- Ashkelon. J. W. B. Judg. 1:18.
- Ashtaroth and Ashtaroth Karnaim. M. E. ¹/₂. N. C. or W. C. Deut. 1:4.
- Ataroth. E. E. Josh. 16:7.

Ataroth Adar. B. W. B. Josh. 18:13. Aven, see Beth Aven. Hos. 10:8. Azmaveth. B. S. Ezra 2:24. Aznoth Tabor. N. S. E. Josh. 19:34. Azzah = Gaza. J. S. W. B. Deut. 2:23.

-B-

Baalah, Josh. 15:9, see Kirjath Jearim. Baalath. D. N. E. Josh. 19:44. Baal Hamon. Mt. perhaps = Amana. Baal Hazor. Mt. E. N. C. 2 Sam. 13:23. Baal Hermon = Mt. Hermon. Baal Meon. R. C. Num. 32:38. Baal Shalisha. E. 2 Ki. 4:42. Baal Tamar. B. S. C. Judg. 20:33. Bahurim. 2 Sam. 16:5. Targum makes = Alemeth. Bashan. District = M. E. $\frac{1}{2}$. Beer Lahai Roi. S. S. Gen. 16:14. Beeroth. B. Josh. 9:17. Beersheba. S. N. C. Gen. 21:31. Beeshterah = Ashtaroth. Josh. 21:27. Bela. Gen. 14:2 = Zoar q. v.Bene Berah. D. N. W. C. Josh. 19:45. Berachah. Valley J. S. E. 2 Chron. 20:26. Bered. S. C. Gen. 16:14. Berothah, Ezek. 47:16, and Berothai, 2 Sam. 8:8 = the modern Beirut. Besor. Brook S. N. W. 1 Sam. 30:9. Beten. A. E. Josh. 19:25. Beth Anath. N. N. C. Josh. 19:38. Beth Anoth. J. C. Josh. 15:59. Beth Arabah. J. N. E. B. Josh. 15: 61. Beth Aram = Beth Haran q. v.

Beth Aven. B. N. C. Josh. 7:2. Beth Dagon. D. W. C. Josh. 15:41. Beth Dagon. A. S. Josh. 19:27. Bethel. B. N. C. Gen. 28:19. Beth Gader = Gedor. J. N. C. 1 Chron. 2:51. Beth Haran. B. E. or G. S. Num. 32:36. Beth Hoglah. B. S. E. B. Josh. 18:21. Bethhoron, Upper and Lower. E. S. Josh. 16:3, 5. Beth Jesimoth. R. N. W. Num. 33: 49. Bethlehem. J. N. E. Gen. 35:19. Bethlehem. Z. C. Josh. 19:15. Beth Nimrah, G. S. W. Josh. 13: 27. Beth Palet. S. E. J. (?) Josh. 15:27. Beth Peor. R. N. C. Deut. 3:29. Beth Shean. I. E. C. Josh. 17:11. Beth Shemesh. J. N. C. B. Josh. 15:10, Beth Shemesh. I. S. E. Josh. 19:22. Beth Tappuah. J. C. Josh. 15:53. Bethul. S. C. (?) Josh. 19:4. Bethzur. J. C. Josh. 15:58. Betonim. G. W. C. (?) Josh. 13:26. Bezek. J. N. W. B. Judg. 1:4, 5. Bezek. M. W¹/₂. E. 1 Sam. 11:8. Bezer. R. S. Josh. 20:8. Bileam. M. $W_{\frac{1}{2}}$. N. C. 1 Chron. 6:70. Bozez. B. C. 1 Sam. 14:4. Bozrah. E. of Bashan. Isa. 63:1.

-C-

Cabul. Z. N. B. Josh. 19:27. Cain. J. S. E. C. Josh. 15:57. Carmel. Mount. See p. 28. [7] Carmel. J. S. E. C. Josh. 15:55. Charashim. Valley. D. C. 1 Chron. 4:14. Chephirah. B. W. Josh. 9:17. Chesalon. J. N. B. Josh. 15:10. Chesil = Bethul, q. v. Josh. 15:30. Chesulloth. Z. S. E. B. Josh. 19:18. Chezib. J. N. Gen. 38:5. Chinnereth. N. S. E. Josh. 19:35. Chinnereth = Sea of Galilee. Num. 34:11. Chisloth Tabor = Chesulloth, q. v. Chozeba. J. N. C. 1 Chron. 4:22.

-D-

 Daberath.
 I. N. C.
 Josh. 19:12.

 Damascus.
 Syria.
 N. of M. E_{2}^{1} . Gen. 14:15.

 Dan.
 N. & M. E_{2}^{1} . N. B.
 1 Sam. 3:20.

 Dan Jaan.
 A. W.
 2 Sam. 24:6.

 Dannah.
 J. C.
 Josh. 15:49.

 Debir.
 J. S. C.
 Josh. 15:49.

 Debir.
 Gen. N. B.
 Josh. 13:26.

 Diblath.
 N. N.
 Ezek. 6:14.

 Dibon.
 R. S.
 Num. 32:3.

 Dibon Gad =
 Dibon.
 See above.

 Dilean.
 J. N. C.
 Josh. 15: 38.

 Dimnah =
 Rimmon (1), q. v.

 Dor.
 M. W_{2}^{1} . W. B.
 Josh. 12: 23.

 Dothan.
 I. S.
 Gen. 37: 17.

 Dumah.
 J. S. C.
 Josh. 15: 52.

$$-E-$$

Ebal. Mount. See p. 28. Ebronah. Near Ezion Geber, q. v.

Edar. J. C. Gen. 35:21. Edrei. M. E¹₂. C. Num. 22: 33. Edrei. N. Josh. 19:37. Eglon. J. S. W. Josh, 15:39. Ekron. D. S. W. Josh, 13:3. Elah. Valley. J. W. 1 Sam. 17:2. Elath. Head of Gulf of Akabah. Deut. 2:8. Elealah. R. N. C. Num. 32:3. Eleph. B. S. Josh. 18:28. Elim. Pen. of Sinai. W. C. Ex. 15:27. Elon. D. S. Josh. 19:43. Elon Beth Hanan. D. E. 1 Ki. 4:9. Eltekeh, D. S. C. Josh, 19:44. Eltolad. S. N. Josh. 15:30. Enam. J. N. Josh. 15:34. Endor. I. N. Josh. 17:11. En Gannim, J. N. Josh, 15:34. En Gannim, I. S. Josh, 19:21. En Gedi. J. E. C. B. 1 Sam. 23:29. En Haddah. I. S. B. Josh. 19:21. En Hazor. N. E. Josh. 19:37. En Mishpat = Kadesh. Wilderness of Paran. En Rimmon. S. N. or J. S. Neh. 11:29. En Rogel, Fountain at S. E. of Jerusalem on border of J. & B. 2 Sam. 17:17. En Shemesh. Spring E. of above. Josh. 15:7. En Tappuah. E. N. E. B. Josh. 17:7. Ephraim. B. N. 2 Sam. 13:23. Ephratah = Bethlehem of Judah. J. N. Mic. 5:2. Ephron. Mount. J. N. B. Josh. 15:9. Eshean. J. S. C. Josh. 15:52. Eshtaol. J. N. B. Judg. 13:25. Eshtemoa. J. S. E. C. 1 Chron. 6:57.

100 OLD TESTAMENT ARCHÆOLOGY.

Etam. J. S. C. 1 Chron. 4: 32.

Etam. J. N. E. C. 2 Chron. 11:6.

Etam. J. N. C. Judg. 15:8.

Ether. S. N. Josh. 15:42.

Ezion Geber. Head of Elanitic Gulf. Num. 33: 35.

-G-

Gaash. Mount. E. S. Josh. 24: 30. Galeed. G. E. C. Gen. 31:47. Galilee. District of N. S. Josh. 20:7. Gallim. J. N. E. C. Isa. 10:30. Gath. J. N. W. C. 1 Sam. 5:8. Gath Hepher. Z. E. 2 Ki. 14:25. Gath Rimmon. D. W. Josh. 19:45. Gath Rimmon. M. W¹/₂. N. W. Josh. 21:24. Gaza, J. S. W. B. Gen. 10:19. Geba. B. C. 1 Sam. 13:3. Gebim. B. S. Isa. 10:31. Gederah. J. N. W. C. Josh. 15:36. Gederah. B. S. C. 1 Chron. 12:4. Gederoth. J. W. C. Josh. 15:41. Gederothaim. J. W. Josh. 15:36. Gedor. J. C. Josh. 15:58. Gerar. J. S. W. Gen. 10:19. Gerizim. Mount. See p. 29. Geshur. Part of Bashan. Deut. 3:14. Gezer. E. S. C. B. Josh. 10:33. Gibbethon. D. N. 1 Ki. 15:27. Gibeah. J. N. C. Josh. 15:57. Gibeah. B. S. C. Josh. 18:28. Gibeah of Saul. B. C. 1 Sam. 14:2. Gibeah in the Field. B. C. Judg. 20:31.

 Gibeah Phinehas.
 E. S. Josh. 24:33.

 Gibeahha-Elohim.
 See Geba.
 1 Sam. 10:5.

 Gibeon.
 B. W. C.
 Josh. 9:3.

 Gihon.
 B. S. C.
 1 Ki. 1:33.

 Gilboa.
 Mount.
 I. See p. 29.

 Gilead.
 Mount.
 G. E. C. Gen. 37:25.

 Gilgal.
 Mount.
 I. Part of Gilboa.

 Judg.
 7:3.

 Gilgal.
 B. E. Josh. 4:19.

 Gilgal.
 E. S. 2 Ki. 2:1.

 Gilgal.
 D. N. W. Josh. 12:23.

 Giloh.
 J. C. Josh. 15:51.

 Gimzo.
 D. S. E. 2 Chron. 28:18.

 Golan.
 M. El. W. C. Josh. 20:8.

-H-

Hachilah. Hill. S. of Jeshimon. 1 Sam. 23:19. Halhul. J. E. C. Josh. 15:58. Hamath. Syria. Num. 34:8. Hammon. A. N. Josh. 19:28. Hannathon. Z. N. E. B. Josh. 19:14. Haphraim. I. N. W. Josh. 19:19. Hareth. Thicket. J. E. C. 1 Sam. 22:5. Harod. Spring. I. E. C. Judg. 7:1. Harosheth. Z. S. W. C. Judg. 4:2. Hauran. District. M. E.¹/₂. E. Ezek. 47:16. Hazeroth. N. of Mount Sinai. Num. 11:35. Hazezon Tamar = Engedi. J. E. C. B. Gen. 14:7; 2 Chron. 20:2. Hazor. N. N. C. Josh. 11:1. Hazor. B. Neh. 11:33. Hebron. J. W. C. Hebron, Josh. 19:28 =Abdon.

Helbon. Syria, N. Damaseus. Ezek. 27:18. Heleph. N. E. B. Josh. 19:33. Hermon. Mount. See p. 29. Heshbon. R. N. C. Num. 32:3. Hezron. J. or S. S. E. B. Josh. 15:3. Hinnom. Valley. See Valleys, p. 32. Hor. Mount. See p. 29. Horeb = Sinai. Horem. N. E. Josh. 19:38. Hosah. A. Josh. 19:29. Hukkok. N. S. C. Josh. 19:34.

-1-

Ibleam and Bileam. I. C. Judg. 1:27. Iron. N. C. Josh. 19:38. Ir. Shemesh. J. N. C. B. Josh. 19:41.

-J-

Jaazer = Jazer.

Jabbok. River. See p. 35.
Jabesh Gilead. G. N. W. 1 Sam. 11:1.
Jabneel. J. N. W. B. Josh. 15:11.
Jabneel. N. W. B. Josh. 19:33.
Janoah. N. 2 Ki. 15:29.
Janohah. E. N. E. Josh. 16:6.
Janum. J. E. Josh. 15:53.
Japhia. Z. S. E. Josh. 19:12.
Japho. D. W. B. Josh. 19:46.
Jarmuth. J. N. C. Josh. 15:35.
Jattir. J. S. C. Josh. 15:48.
Jazer. G. S. B. Josh. 13:25.
Jearim. Mount. J. N. B.
Jebus = Jerusalem.

102

Jegar Sahadutha. G. S. W. Gen. 31:47.
Jehoshaphat. Valley. See p. 33.
Jehud. D. N. C. Josh. 19:45.
Jericho. B. E. Num. 22:1.
Jeruel, 2 Chron. 20:16, part of Jeshimon desert, p. 31.
Jerusalem. B. S. C. B.
Jeshanah. B. N. B. 2 Chron. 13:19.
Jeshimon. Desert. See p. 31.
Jezreel. I. N. W. C. Josh. 19:18.
Jiphthah-el. Valley. Z. N.
Jokmeam. Z. S. 1 Chron. 6:68.
Jokneam. A. S. Josh. 21:34.
Joppa. D. W. B. 2 Chron. 2:16.
Jordan. River. See p. 35.
Juttah. J. S. E. Josh. 15:55.

-K-

Kadesh Barnea. Extreme S. E. Palestine. Kanah. A. N. Josh. 19:28. Kanah. Brook. E. W. Josh, 17:9. Kedesh Naphtali. N. E. C. Josh. 19:37. Keilah. J. E. Josh. 15:44. Kenath, E. of Bashan, Num. 32:42. Kerioth Hezron = Hezron. Josh. 15:25. Kerioth = Kiriathaim. Jer. 48:24. Kidron. See p. 33. Kir Haraseth, 2 Ki. 3:25, and Kir Haresh, Isa. 16:11, and Kir Heres, Jer. 48:31, probably = Kir of Moab, Isa. 15:1. In Moab S. of Reuben. Keriathaim. R. S. C. Jer. 48:1. Kirjath. B. S. W. Josh. 18:28. Kirjathaim = Kiriathaim, q. v.

Kirjath Arba = Hebron. Kirjath Avim, Ezr. 2:25 = Kirjath Jearim. Kirjath Baal, Josh. 15:60 = Kirjath Jearim. Kirjath Jearim. J. N. C. B. Josh. 9:17. Kirjath Sannah, Josh. 15:49, and Kirjath Sepher. Judg. 1:11 = Debir, q. v. Kishon, Judg. 4:7. See p. 35. Kitron. Z. E. C. Judg. 1:30.

Laban, Deut. 1:1 = Libnah. Lachish. J. S. W. Josh. 10: 3. Laish, Judg. 18: 7, and Leshem, Josh. 19: 47 = Dan. N. N. E. Lasharon. N. S. Josh. 12: 18. Lebanon. Mount. See p. 29. Lebonah. E. C. Judg. 21: 19. Libnah. J. W. C. Josh. 10: 29. Lod. D. C. 1 Chron. 8: 12. Luz, Gen. 28: 19 = Bethel.

-M-

-L-

Maacah. District. N. N. Deut. 3:14.
Maaleh Acrabbim = Akrabbim. See p. 28.
Maarath. J. E. C. Josh. 15: 59.
Machpelah. Cave at Hebron. Gen. 23: 17.
Madmannah. S. N. Josh. 15: 31.
Madon. N. S. Josh. 11: 1.
Mahanaim. G. N. C. Gen. 32: 2.
Mahaneh Dan. D. S. Judg. 18: 12.
Makkedah. J. W. C. Josh. 10: 10.
Manahath. J. N. 1 Chron. 8: 6.

Maon. J. S. E. Josh. 15:55. Marah. E. of Red Sea. Ex. 15:23. Maresha. J. C. Josh. 15:44. Maroth, Mic. 1:12 = (?) Maarath. Massah, Ex. 17:7 = Meribah. Mearah. N. W. of Asher. Josh. 13:4. Medebah. R. C. Num. 21:30. Megiddo. I. N. W. Judg. 5:19. Mejarkon. D. N. Josh. 19:46. Mekonah. J. C. Neh. 11:28. Meribah, Ex. 17:7, and Meribah Kadesh, Deut. 32:51, in Wilderness of Sinai. Merom. Waters. See p. 36. Michmash. B. C. 1 Sam. 13:15. Minnith. R. N. Judg. 11:33. Misrephoth Maim. A. W. B. Josh. 11:8. Mizpeh. G. N. E. B. Gen. 31:49. Mizpeh. Land. W. of Hermon. Josh. 11:3. Mizpeh. B. S. W. B. Josh. 18:26. Moreh. Oak, Plain. E. N. Gen. 12:6. Moreh. Hill. I. N. Judg. 7:1. Moriah. Land. B. S. 2 Chron. 3:1.

-N-

Naamah. J. E. Josh. 15: 41. Naaran, 1 Chron. 7: 28, and Naarath. B. N. E. B. Josh. 16: 7. Neballat. D. W. C. Neh. 11: 34. Nebo. Mount. See p. 29. Neiel. A. S. W. B. Josh. 19: 27. Nekeb. N. S. Josh. 19: 33. [8] Nephtoah. Waters. See p. 36. Nephtoah. J. N. E. Ezra 2:22. Nezib. J. C. Josh. 15:43. Nimrah. G. S. Num. 32:3. Nimrim. Waters. See p. 36. Nobah. M. E_{2}^{1} . E. C. Num. 32:42.

-0-

-P-

Olives. Mount. See p. 29. Ono. D. N. C. 1 Chron. 8:12. Ophrah. B. N. C. B. Josh. 18:23. Ophrah. E. N. Judg. 6:11.

Parah. B. S. Josh. 18:23.
Paran. Desert. See p. 31.
Peniel, Gen. 32:30, and
Penuel, Judg. 8:9. G. N.
Pharpar. River. See p. 36.
Pirathon. E. N. C. Judg. 12:16.
Pisgah. Mount. See p. 29.

-R-

Rabbah. J. N. C. Josh. 15:60.
Rabbath Ammon. G. S. E. Deut. 3:11.
Rabbath Moab. S. of Reuben.
Rabbith. I. C. Josh. 19:20.
Rakkath. N. S. E. Josh. 19:35 = Tiberias.
Ramah. B. C. Josh. 18:25.
Ramah. N. C. Josh. 19:36.

106

Ramah. A. N. Josh. 19:29. Ramath Mizpeh. See Mizpeh. Ramoth. I. W. 1 Chron. 6:73. Ramoth Gilead. G. W. Deut. 4:43. Rehoboth. S. S. Gen. 26:22. Remmon. S. N. Josh. 19:7. Remmon Methoar. Z. E. Josh. 19:13. Rephaim. Vale. See p. 33. Rephidim. Wilderness of Sinai. Num. 33:14. Riblah. On Orontes, fifty miles N. of Damascus. Num. 34:11. Rimmon, 1 Chron. 6:77 = Remmon Methoar. Rimmon, Josh. 15:32 = Remmon. Rimmon. B. N. C. Judg. 20:45. River of Egypt. See p. 36.

-8-

Salchah. G. N. E. Deut. 3:10. Salch, Josh. 12:5 = Salchah. Salem, Gen. 14:18 = Jerusalem. Salmon. Mount. See p. 29. Samaria. E. N. 1 Ki. 16:24. Saphir. J. W. Mic. 1:11. Seir. Mount. See p. 30. Selaham-Mahlekoth. J. S. E. 1 Sam. 23:28. Shalem. E. N. E. Gen. 33:18. Shamir. J. C. Josh. 15:48. Sharuhen. S. N. W. Josh. 19:6. Shaveh. Vale. See p. 33. Shebam, Num. 32:3 = Sibmah, q. v. Shechem. E. N. Gen. 12:6. Shenir. Mount. See p. 30. 108

Shibmah, Num. 32:38 = Sibmah, q. v. Shihor, Josh. 13:2 = River Nile. Shiloah, Waters, Isa. 8:6 = Siloam. See p. 36. Shiloh. E. C. Josh. 18:1. Shimron, Z. S. C. Josh, 19:15. Shittim. G. S. W. Num. 25:1. Shunem. I. N. C. Josh. 19:18. Shur. Desert. See p. 32. Sibmah. R. N. E. Josh. 13: 19. Siddim. Vale. See p. 33. Sidon = Zidon. N. of Asher. Gen. 10:15. Siloah, Neh. 3:15 = Siloam. See p. 36. Sin. Desert. See p. 32. Sinai. Mount. See p. 30. Sion. See p. 30. Sirah. Well. J. C. 2 Sam. 3:26. Sirion. Mount = Hermon. See p. 29. Sodom. G. S. W. B. (?) Gen. 10:19. Succoth. G. W. B. Gen. 33:17.

-T-

 Taanach. M. $W_{\frac{1}{2}}$, N. E. Josh. 12:21.

 Taanath Shiloh. E. N. E. B. Josh. 16:6.

 Tabor. Mount. See p. 30.

 Tabor. Plain. J. N. 1 Sam. 10:3.

 Tadmor = Palmyra. Syrian Desert.

 Tappuah. E. N. E. Josh. 16:8.

 Tekoa. J. N. E. C. 2 Chron. 11:6.

 Thebez. M. $W_{\frac{1}{2}}$. E. Judg. 9:50.

 Timnah. J. N. C. B. Josh. 15:10.

 Timnath Heres or Serah. E. S. Josh. 24:30; Judg. 2:9.

 Tirzah. M. $W_{\frac{1}{2}}$. S. E. B. Josh. 12:24.

Tob. Land. M. $E_{\frac{1}{2}}$. W.

Topheth. 2 Ki. 23:10. In Valley of Hinnom. See p. 32.

Tyre. A. N. W. B. Josh. 19:29.

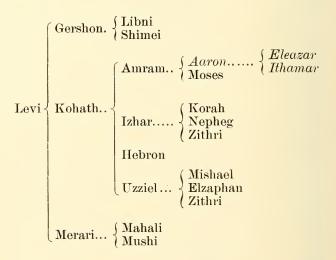
-Z-

Zaanaim. Judg. 4:11, and Zaanannim, Josh. 19:33 = the plateau W. of Sea of Galilee. Zalmon, Mount = Salmon. See p. 29. Zanoah. J. N. C. Josh. 15:34. Zarephath. N. of Asher. 1 Ki. 17:9. Zaretan. I. S. Josh. 3:16. Zareth Shahar. R. S. W. Josh. 13:19. Zarthan, 1 Ki. 7:46 =Zaretan. Zeboim. Valley. See p. 33. Zemaraim. E. S. E. Josh. 18:22. Zereda. E. S. B. 1 Ki. 11:26. Zeredathah, 2 Chron. 4:17 =Zaretan. Ziddim, N. S. Josh, 19:35. Zidon = Sidon.Zior. J. E. C. Josh. 15:54. Ziph. J. S. E. C. Josh. 15:55. Zophim. Num. 23:14. On Pisgah. Zorah. D. S. Josh. 19:41.

XIX.-Special Topography.

Levites, Priests, Levitical Cities, Cities of Refuge, etc.

1. The separate houses of the Levitical branch with the Aaronic or priestly branch italicized, and accordto Ex. 6:16-25 are as follows:



2. There were forty-eight Levitical cities, i. e. cities assigned to the Levites as their portion in the distribution of the conquered territory.

3. Of these forty-eight cities, thirteen were assigned to the priestly portion of the tribe.

4. Of the forty-eight Levitical cities, six were appointed Cities of Refuge.

5. The rule generally followed in the distribution or

location of these forty-eight cities was four cities in the territory of each tribe.

6. The following are the Levitical cities with their location indicated by the initial letter of the tribe in which they were situated. The (P) indicates priestly cities as per Josh 21:13–19; 1 Chr. 6:54–60:

Ain (Ashan) J. S. (P.) Jattir. J. (P.) Eshtemoa. J. (P.) Juttah. J. (P.) Debir. J. (P.) Hebron. J. (P.) Hibnah. J. (P.) Beth Shemesh. J. (P.) Aijalon. D. Eltekeh. D. Gath Rimmon. D. Gibbethon. D. Anathoth. B. (P.) Gibbedn. B. (P.) Gibbeon. B. (P.) Gibbeon. B. (P.) Almon or Alemeth. B. (P.) Gezer. E. Upper Beth-horon. E. Lower Beth-horon. E. Shechem, E. En-gannin L	Heshbon. R. Mephaath. G. Jazer. G. Ramoth-Gilead &-Mizpah. G.
En-gannim. I.	Mahanaim. G.
Jarmuth. I.	Golan. E. M.
Daberath. I.	Ashtaroth. E. M.

7. Of the forty-eight Levitical cities, the six Cities of Refuge, three on each side of the Jordan were according to Num. 35:6, 13, 15 and Josh. 20:2, 7, 9—Kadesh, in N. twenty miles E. S. E. from Tyre. Shechem, in E. and a royal city.

Hebron, in J. and a royal city. Bezer, in R., Plains of Moab, E. of Jordan. Ramoth-Gilead, in G., E. of Jordan. Golan, in $E_{\frac{1}{2}}$ M. or Bashan.

8. Royal Cities. These were:

a. Hebron, where David first reigned. Then

b. Jerusalem.

After the disruption, the capital of Judah remained fixed at Jerusalem, while the political capital of the Northern Kingdom was constantly shifted. Thus

c. Shechem was the city where Jeroboam's palace was located. 1 Ki. 12:25.

d. Tirzah. Was the capital of Baasha, and the first royal city of the Northern Kingdom till the time of Omri, the founder of Samaria.

e. Samaria. This third capital was bought by Omri from Shemer, and eight kings were buried there.

9. Seaports. First mentioned in time of Solomon, viz.:

a. Joppa, where cedar rafts were brought from Lebanon.

b. Ezion-geber, head of Gulf of Akabah, whence Solomon's fleets went yearly.

OLD TESTAMENT ETHNOGRAPHY.

XX.-Parts and Definitions.

The Biblical Ethnography of the Old Testament treats mainly of the Antiquities of the Jews, and of other nations incidentally mentioned in the Old Testament Scriptures. This part of the Biblical Archæology of the Old Testament embraces

1. Domestic Antiquities of the Jews; that is, the Jews in their relations to nature and society.

2. Civil Antiquities of the Jews; that is, the Jews in their relations to the different forms of government and the political state.

3. Sacred Antiquities of the Jews; that is, the Jews in their relations to religious obligations and usages.

4. Literature, Science and Arts cultivated by the Jews, treated of in part under Biblical Philology and Domestic and Sacred Antiquities.

I.-DOMESTIC ANTIQUITIES OF THE JEWS.

XXI.-The Dwelling.

The Hebrew conception of the house embraces not only the building or structure, but also the household or family. The former is treated of in this section, the latter in the section following. 1. Kinds of Dwellings.

a. The Booth. Like the tent and cave the booth formed one of the earliest styles of human dwellings. The material was generally the boughs of trees. The sizes varied. Gen. 33:17; Jon. 4:5. The watchman's booth was a platform elevated on four sticks stuck in the ground in the form of a square. Job 27:18. The tower in Isa. 5:2 was similar to a watchman's booth, only larger and built of stone. The name Succoth means booths. The booth is used by way of illustration, Amos 9:11.

b. The Cave. While the Jews never dwelt permanently in caves, still some of them at times lived in caves and used caves for their sheepfolds as late and even later than the time of Saul and David. The aboriginal Horites (§ 9, 1, e) were cave dwellers as the name indicates. Sometimes the cave was natural, at other times excavated in the rock. Gen. 19:30; Josh. 10:16; Judg. 6:2; 1 Ki. 18:4, 13, etc. The cave is frequently used by way of illustration, Job 30:3, 6; Isa. 2:19; Psa. 71:3, etc.

c. The Tent, as a dwelling is of the highest antiquity, Gen. 4:20. The material was generally goats' hair, sometimes camels'. The size depended on rank, wealth and need. It was generally divided into two or three apartments by means of curtains. Song of Songs 1:5. As tent life was migratory, tent furniture was simple. For centuries, the only sanctuary Israel had was a tent-structure. The figurative use of the tent is common in Scripture. Isa. 38:12; 54:2.

d. The House. The first mention of the house, or permanent dwellings, in the Bible, is in Gen. 4:17. In the building the material commonly used was bricks, generally sun-dried, sometimes burnt in kilns. Straw was used to give the sun-dried bricks cohesiveness. Ex. 5:16. Bitumen abounded in certain regions and was used for mortar and cement. Gen. 11:3–5. Stone was also largely used as a building material. Wood was scarce. For "Summer" and "Winter" house and "Summer Parlor" see what follows under Architecture.

2. Architecture of Dwellings.

a. Location. The location or site chosen whereon to build the house is usually an elevation. This is especially the case in Egypt, in order to avoid the moisture arising from the lateral infiltration of the waters of the Nile, which percolate through the porous soil beneath the surface, and then by capillary attraction are gradually drawn to the surface at great distances from the river itself.

b. Ground plan. The ground plan of the house is a square. The house may or may not contain an interior court, according to the land and means at one's disposal. The typical oriental house contains an open, square interior court around which the house is built.

c. External appearance. The exterior of the house is, as a rule, very plain. The blank walls are relieved simply by the huge entrance door, and a latticed window or two. In the latticed window is sometimes a miniature bay-window-shaped projection enabling the inmate to look up and down the street or road. Judg. 5:28.

d. The Door. The outer door by which entrance to the house is gained, is usually large, heavy and kept constantly locked. The lock is likewise wooden, consisting of a piece of wood half a foot long, two or three

inches wide, nailed vertically at the edge of the door. This part of the lock is alluded to in Song of Songs 5:5, where it is rendered "handles of the lock." Through a groove in the central part of this piece of wood, a similar piece of wood passes at right angles to it and enters the wall. As it enters its place in the wall, iron pegs drop from the first to the second piece of wood and so lock the door. The pegs are raised and the bolt withdrawn by means of a wooden key furnished with stationary iron pegs, entering a lengthwise groove in the horizontal piece of wood and lifting the movable pegs so that the bolt can be withdrawn. The large key when carried with a person is attached to the girdle or swung over the shoulder. Isa. 22:22. The door being opened admits into the court or into a very short passage leading directly into the court.

e. The Court. It is simply a square, open place, with the house rising about it on two or more sides, The court is scantily furnished. The doorkeeper, the servants and sometimes the animals, find their proper place in the court. The guest rides into the court and waits there till he is summoned or invited to be received. Esth. 6:5. From the court a stair-case ascends leading to the apartments and rooms of the house.

f. Apartments and Rooms. If means will permit the house is of two or more stories. The rooms are divided into the male and female apartments, and into the reception and living rooms. The rooms are square or oblong with windows opening upon the interior court.

g. The roof is flat and frequently resorted to in the evening, especially on the part of the female occupants of the house, for the cool, fresh evening airs. Much

117

of the work of the household is done upon the roof. Josh. 2:6. The roof is commonly composed of a few successive layers of palm branches, matting and mortar. The roof is surrounded by a wall, while from every part of the roof a view of the surroundings is obtained. Hence David's sin, 2 Sam. 11:2.

h. Summer and Winter House. In Judg. 3:20; Jer. 36:22 and Amos 3:15 we read of the "summer house" and "winter house." They were not different dwellings but different parts of the same dwelling, viz. the "summer house" being the upper part of the house, which was cooler, and the "winter house" being the lower part of the house, which was warmer. The "summer parlor" which Eglon, King of Moab, had "for himself alone," was a small room built by itself on the roof of the house, having many windows to catch the breeze. Judg. 3:20.

3. Furniture of Dwellings.

The furniture of the house was both simple and limited, as indicated by 2 Ki. 4:10. In fleeing from Absalom, King David furnished his camp only with "beds," and washing and cooking utensils. 2 Sam. 17:28.

a. The Bed. The "beds" furnished by David were not bedsteads—a thing exceedingly uncommon among the Hebrews—but a skin mat or rug thrown on the ground, with the outer outdoor garment or a comfortable for covering. At home or on the journey this was the usual bed. The nearest approach to a bed was a palm-branch or wooden cot-frame, or raised earthen platform on the side of the room. 2 Ki. 1:4. Bedsteads were not unknown but luxurious. Amos 6:4. As with the ancient Egyptians there were sometimes wooden head-rests, but the arm doubled under the head served as the most common pillow. Commonly the person slept in the clothing worn during the day, the outer garment being removed but used as a covering. Deut. 24:13.

b. The Chair, was rarely or never used by the Hebrews. The word does not occur in the Old Testament. The floor was the common place of sitting. Sometimes a wooden bench or earth-work raised in the form of a bench was used.

c. The Table. A piece of cloth, matting or leather thrown on the floor commonly served as the table. Still the table was known, used and included in the tabernacle furniture. The table for the shewbread was a cubit and a half in height, that is, about twentynine inches. When the table was used it was generally about the same height, and consisted of a stool whereon was a tray, about which, in case of a meal, the people sat on the floor, with right knee raised. Gen. 27:19. Reclining at the table is a foreign notion.

d. The Lamp, was generally a partly covered saucer-shaped vessel, only of greater length than width, with the end turned up to make place for the wick, which ran down into the oil in the saucer. The oil was olive oil. The material of the lamp earthenware or metal. Job 18:6. By way of illustration Psa. 119:105; Isa. 62:1.

e. Other Utensils. The washing and cooking utensils were both of earthenware and metal, and of different shapes. The fuel was generally charcoal. The hands were washed by a servant, who also held the towel, pouring water over them. 4. The Caravansary. The Caravansary was the public inn. Its Hebrew name, Malone means "lodging place." Gen. 42:27. The structure is simple and varies in size. The material is generally mud-brick, sometimes masonry, with stone. The plan is a square or oblong court with one or two stories of rooms built around it. The entrance is a large door in the middle of one of the sides. There is a well in the middle of the court, and stables on the opposite side from the entrance.

5. *Cities*, etc. It is to be noted

a. That at an early period a distinction was made between cities and villages. The villages were smaller, were near the cities and more or less dependent on those cities. So we frequently read of "cities and their villages," and "cities and their daughters," i. e. towns, e. g. Josh. 15:45.

b. Anothor distinction was between walled and unwalled cities. The villages were without walls, and generally depended on the city near which they stood. The unwalled eity was distinguished from the village only in size. Cities were also distinguished between those simply walled, and those more strongly fortified. 1 Sam. 6:18; Ezek. 38:11. The people lived in cities or villages, not in houses separated from each other.

c. At intervals the walls of a walled city were pierced by gates which were large, often two leaved, and furnished with locks and bars. 1 Sam. 23:7. The material was wood, rarely brass and iron. Psa. 107:16. The gate was a place of public gathering and marketing. Psa. 69:12. The gates were always closed at night.

d. Three kinds of streets are alluded to:-a long,

narrow and winding street, Josh. 2:19; a short, narrow street, or alley, Prov. 7:8; and the broad street including the squares and open public places, 2 Chron. 29:4.

e. The Bazaar was a certain street or section of a city devoted to the carrying on of a particular trade. Jer. 37:21.

f. Cities and villages were supplied with water by means of Cisterns, Gen. 37:22; Wells, Num. 21:17; Pools, Eccles. 2:6; and Conducting Pipes, Isa. 7:3.

XXII.—The Family.

1. Names. The use of family names to distinguish between persons having the same Christian name is of comparatively late origin. With the Jews the distinction was made in various ways, as, e. g.:

a. By the name of the tribe, thus, Beni or Sons of Israel or Jacob. Gen. 42:5.

b. By the name of the city or town to which the person belongs, thus, Eliezer of Damascus. Gen. 15:2.

c. According to the nationality or religion of the person, thus Abraham, the Hebrew, Gen. 14:13; Mordecai, the Jew, Esth. 6:10.

d. According to the person's occupation.

e. Because of some historical incident, thus, Isaac, *i. e. Laughter.* Gen. 21:4-6.

f. Surnames were sometimes made by prefixing the word son, thus, Ben-jamin, i. e. son of the right hand.

g. Proper names were frequently the expression of parental feeling at the birth of the child, thus, Simeon, *i. e. Hearing* or God has heard, and Joseph, *i. e.* God has added.

h. Names are also formed out of the names of the Deity, thus, Elijah, *i. e.* My God is Jehovah.

2. Children. It is to be noted

a. Children were regarded as one of the greatest blessings from the Lord. Psa. 113:9.

b. A son was held in higher esteem than a daughter. Gen. 16:4, 11.

c. The first-born son had peculiar rights and privileges. Deut. 21:15-17; Gen. 48:18.

d. A dying father's blessing was uttered under the influence of divine illumination and held to be a prophetic oracle. Gen. 49:1–28.

e. Midwives were employed at the time of birth, Ex. 1:15-17, but Hebrew mothers uniformly nursed their own children. 1 Sam. 1:23.

f. A son was circumcised on the eighth day after his birth, at which time he also received his name. Gen. 17:12. If he were a first-born son, redemption money was paid for him, to the amount of five shekels, in commemoration of the deliverance of the first-born of Israel when those of Egypt were slain. Lev. 27:6.

g. On the fortieth day after the birth of a son, and the eightieth after that of a daughter, the mother, bringing an offering, presented herself at the sanctuary for ceremonial purification. Lev. 12: 2-7.

h. Mosaic legislation protected the rights of children, while it encouraged the utmost tenderness towards them.

i. The greatest importance was attached to the correct training of the child from early infancy. Prov. 10:1.

3. Marriage.

a. In accordance with the divine intention, marriage was well-nigh universal among the Hebrews.

[9]

b. Monogamy was the divine idea in marriage, although polygamy was permitted because of the hardness of the human heart. The Mosaic laws everywhere recognize the principle of monogamy as the only true one, while polygamy was practiced under restrictions. Lev. 18:18; Ex. 21:10, 11, etc.

c. Marriage between near relatives was carfully defined, regulated and prohibited by the Mosaic law. Lev. 18:6–18; 20:11–21; Deut. 27:20–23; 24:4. Israelites were also prohibited from intermarrying with any of the seven Canaanitish nations for fear of endangering their loyal relations to Jehovah. Ex. 34:16. After the exile the law was extended to forbid all foreign marriages. Ezra 9:12. Additional restrictions were placed on the priests, while the high priest was limited to a "virgin of his own people." Lev. 21:7, 14.

d. Betrothal, in great measure, was a matter of business between the parents or near relatives of the contracting parties. It was, however, none the less sacred, and was indeed more than a promise to marry; for a person could be freed from betrothal vows only by death or legal divorce, while faithlessness to those vows was punished as adultery. The dowry was fixed before betrothal, and was not a price paid for the wife, but a present to the parents, Ex. 22:16, 17, or to a brother, Song of Songs 8:12. Marriage contracts were for the most part oral, and in the presence of witnesses. The marriage bond was guarded by strict and special statutes, the sin of adultery being originally punished by death.

4. Divorce. The Mosaic law permitted divorce, but

attached to it severe restraints. The law relative to divorce is laid down in Deut. 24: 1–4.

5. *Concubinage*. In regard to concubinage and other forms of unchastity, it is to be noted:

a. Polygamy is having more wives than one, but these wives, before the law, were on the same standing with one another. The concubine, however, was something less than a wife, but more than a mistress. The wife was on an equality of social position with her husband, but the concubine was a bondmaid; frequently the servant of the wife, Gen. 29:24, 29, or a captive taken in war, Deut. 21:10–14, or purchased, Deut. 7:3. The Mosaic law carefully guards the rights of the concubine as well as those of the wife. The disabilities of the concubine related chiefly to the matter of divorce, the rights of her children, and her own position after the death of her lord. Judg. 9:18.

b. Three other forms of unchastity are the subject of special legislation in the Mosaic laws; viz. the seduction of an unbetrothed maiden, Ex. 22:16, 17; Deut. 22:28, 29; ordinary harlotry, Lev. 19:20; 21:9 etc.; and harlotry indulged in under the plea of honoring idols.

6. Social Status of Women. Hebrew women moved on the same social plane, not only with one another, but with the male sex. They were held in the highest respect by men. Their secluded life, their custom of veiling themselves in public, and other like matters, were not imposed upon them by the male sex, but matters of their own choosing and ruling, while they resented any publicity to which men might wish to subject them. Song of Songs 1: 6.

7. Social Intercouse. The Hebrews were by nature

a social people, while their political and religious institutions contributed to sociability.

a. Salutations were elaborate but none the less sincere. There were different movements of the hand and different degrees of bowing, but not an actual falling to the ground. So there were different methods or places of kissing, variously indicating obedience, honor, joy and different degrees of intimacy. The universal word of salutation was "Peace." 1 Sam. 25:6.

b. A number of Jewish festival occasions gave opportunity to and encouraged social intercouse. In these the Jews heartily engaged, as *e. g.* the pilgrimage festivals, and the festivities attending the ingathering of harvests, the shearing of sheep, the weaning of children, the arrival of guests, weddings, etc.

c. Hospitality was the great, ruling law of society then as it still is in Egypt, Arabia and Palestine. A guest was welcomed as a sacred blessing and the entertainment of him a delightful, sacred privilege, not simply a courteous obligation. Gen. 19:1–10.

8. Servants. At the time of the deliverance of the Mosaic law, both voluntary and involuntary servitude existed. But while Israel received and observed the institution of slavery from former times, still in Israel slavery was a very different institution from that of other nations and later times. The slave was legally on the same plane as the hired servant, sometimes treated better than the hired servant, and sometimes electing to remain in so-called slavery after emancipation had been offered. It was not allowable to sell a Hebrew man or woman to a foreigner outside of Palestine. A Hebrew might become a slave or rather bond-

servant by voluntarily assuming it on account of poverty, or by being forced into it on account of debt. If for debt the period of slavery terminated with the satisfaction of the debt, or with the Year of Jubilee, if that year should happen to come before the debt was paid. With the Year of Jubilee, *i. e.* every fiftieth year, all servitude throughout the land was terminated. Slaves having become free were, by law, abundantly supplied with gifts by their masters. Deut. 15: 13–15. Pentateuchal legislation moreover distinguishes between Hebrews and foreigners as servants and slaves.

9. Death and Burial. After death the body was wrapped in a linen cloth, with perhaps spices. Embalming was not general. Burial took place the same day or following morning. The coffin was open and carried to the tomb. The Hebrews buried, did not cremate, excepting in rare and special cases. Mourning was demonstrative, but sincere. The period of mourning lasted seven days, extended on special occasions. Gen. 50:10. Interment was generally outside the town. The tomb was an individual vault partly beneath and partly above the surface of the ground.

XXIII.-The Meal.

1. The food of the ancient Hebrews was generally simple, and chiefly vegetable. Milk and honey were quite largely used, but bread, vegetables and fruit formed the ordinary diet. Deut. 8:8, 9; Judg. 19:5.

2. The principal cereals were wheat, barley, millet, spelt, etc. Grain was sometimes eaten in its native state, sometimes parched and sometimes boiled, dried and then ground. Ruth 2:14. Grain was ground by means of the mortar and pestle, Num. 11:8, and by means of the mill. The mill consisted of two cylindrical stones, each about a foot and a half in diameter and five inches thick. The upper stone, lying on the other one, has a hole in the center into which the grain is poured, and then crushed as the upper stone is turned by means of an upright spike fastened in the stone. Two women sitting opposite each other generally do this work. Job 31:10.

3. Bread was made from wheat and barley flour, generally ground coarse. Barley was regularly used by the poorer, and sometimes, in case of necessity other cereals. Ezek. 4:9. Millet was a grain of the broom corn variety, and spelt a kind of wheat. There was a coarser and finer variety of wheat flour used. Gen. 18:6. Bread was leavened and unleavened. The unleavened was to be used when offered in connection with sacrifices made by fire, and during the feast of the passover. The loaf was a large, round, flat cake. Hos. 7:8. The bread was baked on coals, on heated stones, and in earthen ovens. Hos. 7:4, 6.

4. Milk was prepared in a number of ways and largely consumed. Milk, artificially curdled, was also prepared in different ways and especially favored. Olive oil entered into the preparation or was added to most dishes. Vinegar and different vegetables pickled was a constant dish. Ruth 2:14. Oil cakes and sweet cakes were not uncommon. 1 Ki. 17:12, 13.

5. The vegetables chiefly used were beans, cucumbers, garlic, leeks, lentils, onions, melons, "bitter herbs" consisting of lettuce, endive, chickory, horseradish, coriander, and doubtless many others. (See § 16.) Salt, rue, cummin, mustard, etc. were used as condi-

126

ments. (See § 16.) Among fruits, the fig, date and pomegramate were largely used.

6. Flesh food was used to a limited extent and under a number of restrictions. Certain kinds of animals now used were altogether prohibited as food. (See § 17.) Of animals permitted certain parts were also prohibited as food, *e. g.* the fat lying about the stomach, the kidneys, the part that is "by the loins," etc. Again animals or parts of animals designated for sacrifice or other holy uses could only be eaten under specified conditions. Meat offered to idols was also forbidden. In Lev. Ch. 11 and Deut. Ch. 14 will be found the list of living things ceremonially fit and unfit to be eaten.

7. Eating with the fingers was the prevailing method. This necessitated the washing before and after meals. In washing another person poured water over the hands, the hands thus constantly being in clean water. 2 Ki. 3:11. In 1 Sam. 9:13 we have the only instance in the Old Testament of prayer being actually offered in connection with a meal, but Deut. 8:10 would seem to imply it. The principal meal was in the evening. So the principal religious meal, the passover, was eaten after sunset. The next principal meal was the morning one. Ex. 16:12:1 Ki. 17:6. The meal was served on a tray placed on the floor or a low stool around which the persons sat, not reclined, with right knee raised, and elbow of right arm resting on it, or they sat with legs crossed. A guest was especially welcomed at meal time, to partake with the host, while being waited upon by the hostess, or at times the guests were waited upon by host and hostess. Gen. 18:1–9.

127

XXIV.-The Clothing.

1. Kinds.

There is a distinction between male and female dress, and between the ordinary dress and the official dress of priests, rulers, etc. The priestly dress is described accurately, while comparatively little is said about the ordinary dress.

2. Materials.

a. Leaves of trees. Gen. 3:7.

b. Skins of animals. Gen. 3:21.

c. Hair of goats and camels. Lev. 11:32.

d. Wool. Lev. 13:47.

e. Linen,—coarse and fine. Lev. 13:47; 1 Chron. 4:21.

f. Silk (possibly). Ezek. 16:10, 13.

g. The wearing of a mingled stuff, as wool and linen together, was prohibited. Lev. 19:19; Deut. 22:11.

3. Colors.

a. The natural colors were white, black, red, yellow and green. White was the prevailing color, and it also symbolized joy and purity.

b. The artificial colors named are chiefly purple, blue, scarlet, and vermilion. Purple, blue and scarlet were used in the dress of the Levitical priests, and the curtains of the tabernacle. Purple robes were worn by kings and other high officers. Judg. 8:26. Scarlet was also worn by the wealthy and luxurious. 2 Sam. 1:24.

c. Joseph's "coat of many colors" is rendered in the margin of the Revised Version as being instead "a long garment with sleeves." According to the term used, and the corresponding Arabic, this garment of Joseph was simply a new and wide, *i. e.* full, ample. *Kuftan.* The Kuftan is the outer garment of those worn under the girdle. It reaches from head to foot, and is open all the way down the front, while being so ample in width as to double over considerably in front. It is also marked by its long sleeves reaching four or five inches beyond the finger tips, as fine propriety calls for the covering of the hands. The material is generally rich and finely striped in various colors. Joseph's garment was also probably embroidered along the two front edges. Gen. 37:3, 33.

4. *Men's Dress.* The general feature common both to male and female attire is that it shall be loose, ample, flowing.

In regard to men's dress several terms are used referring to clothing in general and to special garments.

a. Beged is a term used for clothing or garments generally, though sometimes it refers to a better kind of outer garment. Gen. 27:15.

b. Kesuth, refers to garments as articles for covering the body. Ex. 22:27.

c. Lebush is also a general term for garments, in which the idea of *dressing*, being *well-dressed* is the prominent idea, and not simply covering. Hence the term is used mostly in poetry, and is sometimes used to designate the garment of an eminent person. 2 Sam. 20:8. The term is still used in Arabic.

d. Simlah is generally used for the large outer garment covering all,—the wrapper, cloak or tunic that a person wears over everything and frequently uses for his covering at night. Gen. 9:23.

e. Gelom was an imported outer garment similar to the Simlah. Ezek. 27:24.

f. Addereth also a mantle similar to the Simlah but oftentimes of better or nobler material. 2 Ki. 1:8; 2:13.

g. Meil was a tunic like that described as constituting Joseph's "coat of many colors." See above under 3, c. Samuel's mother made for him a *Meil* while he served Eli at the tabernacle.

h. Kethoneth was a sleeveless and shorter under tunic worn by both men and women.

5. Girdle, Head and Foot Dress.

a. The girdle has always been worn by both men and women in the East. Sometimes a leather or cloth belt is used, but generally it is the girdle, of material somewhat heavier and richer than the clothing, and about a yard in width and from three to five in length. It is used to bind the clothing about the body, to hold up the clothing when greater freedom of movement is required, and is always tightened up about the loins when an unusual degree of strength is to be put forth. Job 38:3; Psa. 93:1 etc. The receptacle made by the fold of the tunic above the girdle and over the bosom is made to receive various articles. Psa. 74:11.

b. The head dress consisted of a tight fitting cap with a turban wound about it, similar to those still worn. Job 29:14.

c. Sandals were worn on the feet. Originally they consisted of soles bound to the feet by thongs. The sandals were not generally worn in the house, while many of the poor went with bare feet. Ex. 12:11.

6. Women's Dress and Ornaments.

The full out-door dress of a woman consisted first of all of a large flowing outer shawl covering the whole

130

person, passing from the forehead over the head and down to the ground. It was gathered and held in position by the two hands in front. Then came the face veil, falling to the feet, fastened behind the head, and leaving but little more than the eyes exposed. Under the shawl and tied about the head was an oblong embroidered handkerchief with the two ends falling backward with the hair. The outer garment under the belt, worn out of doors, passed from the neck to the feet, was of rich material, and opened and embroidered at the front above the belt. Beneath this was an embroidered jacket. In the house, embroidered caps were worn, or headtires covered with miniature gold or silver discs sewed on. In explanation of some of the above and in addition to the above, the articles of dress and jewelry mentioned in Isa. 3:18-24 should be noted. Various translations have been given to the articles included in that list. The translation herewith given is based upon the Arabic, and the names of some of them which still continue in use. The renderings of the Authorized and Revised Versions are also given.

a. Akaseem. A. V. "tinkling ornaments." R. V. "anklets." Arabic Akas whence we have anklets.

b. Shebiseem. A. V. and R. V. "couls or networks." Arabic Shebeth whence we have clasps or brooches.

c. Saharoneem. A. V. "round tires like the moon." R. V. "crescents." Arabic Sahar whence we have jewels.

d. Netefoth. A. V. "chains." R. V. "pendants." Arabic Nataf whence we have earring or eardrops.

e. Sheroth. A. V. "bracelets." R. V. "bracelets

or chains." Arabic *Sheree* whence we have *golden discs* similar to small coins.

f. Realoth. A. V. and R. V. "mufflers." Arabic Raghal, plated jewelry, *i. e.* plated silver or gold.

g. Peayreem. Headtires,

h. Saaroth. A. V. "ornaments of the legs." R. V. "ankle-chains." Arabic Saad, *i. e. ankle chains* attached to the anklets to regulate the step.

i. Keshureem. A. V. "head bands." R. V. "sashes." Arabic *Kashar* whence we have *cosmetics*.

j. Batay hanafaish. A. V. "tablets." R. V. and Arabic *perfume boxes.*

k. Lehasheem. A. V. "earrings." R. V. "amulets." Arabic Haraz, *i. e. amulet* or charm.

l. Tabaoth. A. V. and R. V. "rings." Arabic *Taba*, whence *rings*, especially seal-rings.

m. Nizmay haaf. Nose jewels.

n. Mahalasoth. A. V. "changeable suits of apparel." R. V. "festival robes." Arabic Halis, i. ϵ . overdress, described above as worn under the shawl and belt.

o. Maatafoth. A. V. and R. V. "mantles." Arabic *Ataf* whence the oblong, embroidered handkerchief tied on the head and hanging down behind as described above.

p. Mitpahoth. A. V. "wimples." R. V. "shawls." Arabic Taphah whence shawl from to cover over.

q. Hariteem. A. V. "crisping pins." R. V. "satchels." Arabic embroidered purses.

r. Gilyoneem. A. V. "glasses." R. V. "hand mirrors." Arabic Galawa whence also hand mirrors.

s. Sidyoneem. A. V. and R. V. "fine linen." Arabic Sadan whence strings and fringes whereon are

 $1\,32$

gems or pearls or the like hanging down from the neck to the breast.

t. Senefoth. A. V. "hoods." R. V. "turbans." Arabic Sanaf whence embroidered caps.

u. Rededeem. A. V. and R. V. "veils." Arabic Radad whence the front veil.

v. Maasay Mikshay. A. V. and R. V. "well set hair." Arabic Heshawa whence waving hair.

w. Peteegeel. A. V. and R. V. "stomacher." Arabic Fagal whence flowing robes.

In the above the Hebrew words are the plural nouns just as they appear in the passage in Isaiah, while the Arabic words are the root words whence the similar noun is derived.

7. The Hair was highly esteemed as a natural ornament and mark of beauty, especially thick, flowing black hair. Song of Songs 5:11. With women the hair was long and flowing, Song of Songs 4:1, with men trimmed, not shaven. The priests were bidden to "poll," that is trim the hair, as against shaving or allowing it to grow long. Ezek. 44:20. Very long hair was the mark of the Nazarite. Num. 6:5. The case of Absalom was an exception. Hair long and uncared for was also a sign of sorrow. Gray hair was a mark of dignity and honor.

8. Pigments—Cosmetics—Perfumes.

A black paint or powder was as it still is applied to the eyelids and eyebrows in order to make the eyes appear large and dark, such eyes especially being regarded as beautiful. Jer. 4:30.

From the earliest days to the present time the Hebrews and other oriental peoples have been noted for their extreme love for and extensive use of perfumes. Throughout the Song of Songs are repeated references in illustration of this fact. Perfume is also largely used as a figure of speech indicating acceptability, fame, delight, etc.

9. Different kinds of apparel were worn to indicate rank, official position, special occasions, etc. For Priests' dress, etc. see Sacred Antiquities.

XXV.-The Principal Occupations.

The earliest and chiefest occupations of men have been the tilling of the ground, and the rearing of sheep and cattle. Gen. 4:2; 24:35; 46:34. Property consisted largely in sheep and cattle as Mosaic legislation shows, while large numbers were required for the yearly sacrifices.

1. Sheep.

a. The most numerous and important of domestic animals. To indicate their abundance:—at the dedication of the temple, Solomon offered in sacrifice 120,000 sheep and 22,000 oxen. Just before crossing the Jordan the Hebrews took from the Midianites 675,000 head. The King of Moab paid to King Ahab a yearly tribute of 100,000 rams with their wool, and as many more lambs.

b. There were different breeds of sheep, but the most common variety was the broad or fat-tailed species.

c. White was the usual color of sheep. Rarely black or speckled might be found. They bear twice yearly.

d. Sheep were of first and chiefest value for food and clothing, and as offerings for the sacrifices. Lambs of the first year were the most common for the offerings; but sheep under three years old, and especially rams were selected. Ex. 29:38; Lev. 9:3, etc.

e. Sheep enter very frequently into the figurative language of Scripture. The helplessness, tractability, patience, innocence, strong attachment, readiness to follow, and other qualities seen in the sheep are brought forth to enforce great spiritual truths.

2. The Shepherd.

a. The term shepherd as used in the Bible includes much more than is commonly assigned to it. The duties and relations of the shepherd were far more numerous and important than is generally supposed. The verb to shepherd is frequently used in the Hebrew Scriptures, and it is generally translated to feed; and shepherding and feeding are generally conceded to be not only synonymous but equivalent, whereas feeding is only one item. Other ideas, duties, are embraced in the term, just as important as feeding, and to the shepherd more laborious and perilous:-the ideas, duties, of leading, protecting, sheltering, finding when lost, caring for in every event, being constantly with them, till the shepherd and the sheep come to feel and live a life in common, so that nowhere else will there be found a relationship so close and constant between the animal and the human. Isa. 40:11.

b. The 23rd Psalm furnishes a perfect and complete definition of the Shepherd;—of the real shepherd, of those who are placed to be shepherds over others, and of the Lord as the Shepherd of his people. Thus the shepherd is to his flock the source of all sufficiency, security, leading, restoration when lost or wounded, guidance in safety, deliverence from all fear and danger, while they enjoy his constant care, ample provision and abiding presence in all present and for all future times.

c. The shepherds instruments were a long staff with a crook at the end, a rod, Psa. 23:4, a sling, and a double-reeded musical instrument called still the *mizmar*, whence the Hebrew word *mizmor*, *i. e. a Psalm*. At night when entering the fold the shepherd has his sheep pass through singly under his rod to ascertain in this way if any were missing. Ezek. 20:37.

d. The princes and prophets of Israel were frequently styled the shepherds of the people, as was also Jehovah himself. Psa. 70:20. Some of these princes and prophets were originally shepherds as *e. g.* David and Amos.

3. The Sheepfold.

The fold was generally a stone wall inclosure. The shepherd and his dog watched at the entrance. Sometimes a watch tower was built and used. Mic. 4:8.

4. Goats.

a. Goats were numerously reared. Seven different Hebrew words are used to designate the goat, each word having special reference to some peculiarty in the animal.

b. A well defined distinction is made between sheep and goats. They were pastured in different flocks, and had a separate fold from the sheep.

c. The young of goats, or kids, are most frequently mentioned in the Bible, especially as food at entertainments. The prohibition of the Mosaic law not to see the a kid in its mother's milk, does not have reference to cooking the kid in its mother's milk, or using the mother's milk, etc., but the prohibition is that the kid shall not be killed while it is yet sucking its moth-

137

er's milk. The expression is still used in the East, and has precisely this and no other meaning. Ex. 23:19.

5. Cattle.

a. Among animals, cattle were the chief helpers of man in doing a number of things necessary in agriculture. One of the principal Hebrew terms for the ox and cow is based on their ordinary employment, viz. the breaking up or ploughing of the soil preparatory to sowing. Cattle were also employed to tread out the grain, in lieu of threshing, and also to draw and earry burdens. The milk and flesh also served as food.

b. A Deuteronomic prohibition forbids the yoking of an ox and ass together in ploughing, owing perhaps to the unequal strength of the two, which would react on both. Deut. 22:10.

c. Cattle were highly esteemed and valued. In Egypt divine honors were paid to the sacred bull Apis-Osiris, and the Israelites themselves who had seen this form of worship in Egypt could with difficulty be kept from falling into it.

6. The Horse.

Not till a late period did the horse become common or much used in agriculture. Until the Davidic period they were not used in war by the Israelites. Solomon imported them from Egypt for this purpose. About two centuries later they came to be used to some extent in agriculture.

7. The Camel.

The variety was the single hump camel. In early times seems to have been possessed only by the wealthy. Little used by the Hebrews on account of the character of the country. For the most part mentioned in connection with neighboring peoples, es-

[10]

pecially dwellers in and traders from desert territory. Camel's flesh was forbidden as food. From the skin various articles besides sandals were made. The hair was used in the manufacturing of garments, tents, etc. The palanquin is constructed on a camel or swung between two camels. See Camel under Zoölogy.

8. The Mule and Ass.

The Levitical law prohibited the rearing of animals produced by two diverse species, as the mule. While it is probable that the Hebrews did not break the law, still they possessed mules, although the mule is not mentioned till the time of the kings. The translation "mules" in Gen. 36:24 has been corrected by the R. V. to read "hot springs."

At a very early period the Ass was known, domesticated and used. Before the tenth century B. C. it was the animal most used for riding and carrying burdens. Num. Ch. 22. Like the ox it was most serviceable as a helper to man; hence the commandment Ex. 20:17. Figures in the Messianic prophecy Zech. 9:9. See under Zoölogy.

9. Agriculture.

Besides the rearing of sheep and cattle, agriculture constituted the other principal occupation of man. During their residence in Egypt the Hebrews became acquainted with many processes of agriculture. When they settled in Canaan the most of them became agriculturists. Pentateuchal legislation regards land as the principal possession and agriculture as the principal occupation. Moreover, according to this legislation, each family was to have its own section of land, which was carefully surveyed, and to tamper with that survey was a crime. Deut. 19:14. Instead of "acres" land was divided into portions such as a yoke of oxen could plow in a day. The value of the land was in proportion to its yield in grain, Lev. 27:16. Irrigation was carried on, but not to the extent made necessary in Egypt. Ashes and manure were used in fertilizing. The fertility of the land was far greater then than now.

10. The Sabbatic year.

The rich fertility, the natural productiveness of the soil in ancient times was heightened by the institution of the Sabbatic year, according to which the Israelites were required to let the ground lie fallow every seventh year;—a legislation similar to that of the seventh day and seventh month. Ex. 23:10-12; Lev. 25:1-7; Deut. 15:1-11. Whatever grew spontaneously during the Sabbatic year was to be shared equally with the poor, the strangers and the cattle.

11. Grains.

The principal grains were wheat, barley, spelt, millet, fitches, cummin, beans and lentils. For description of these see under *Botany*.

12. Seasons. See § 15.

13. Agricultural Implements.

These were very few and crude. The plough was of the same general form as the modern plough, but of ruder construction, and did but little more than break the surface soil instead of turning it over. The yoke also was on the same plan as the modern yoke. The harrow was a board to which was attached thorn bushes. Instead of the whip was the goad, a long stick made sharp at one end and capped with an iron point. Judg. 3: 31.

14. Agricultural Processes,

a. The sowing generally followed the early rain. $(\S 15, 3.)$ The seed was sown broadcast with the hand, sometimes in drills. The order was the hardier products first and ending with wheat and barley. It was forbidden to sow the same field with two kinds of seeds. Lev. 19:19.

b. The harvest was inaugurated by bringing a sheaf of new grain into the sanctuary and waving it before the Lord. Seven weeks from this date, at the feast of pentecost, two loaves of bread, made of new flour, were waved before the Lord, as the passover sheaf had been;—the sheaf having been waved on the day following the passover Sabbath. During the seven weeks between those two dates the harvest continued, including threshing. Grain was generally cut with a sickle. It was then piled up or bound into sheaves.

c. Threshing was done in the field and followed close upon reaping. The threshing floor was a hardened piece of ground, circular in shape. The grain was beaten out with sticks, or by driving yoked cattle over it, the cattle drawing a threshing sledge or roller in which were fitted revolving cylinders. Isa. 28:27.

d. Winnowing immediately succeeded threshing. The straw was thrown up with a fork or shovel, and then afterwards the mixed grain and chaff were thrown up with a fan or shovel, the grain falling to the ground while the chaff was carried away by the wind. Isa. 30:24.

e. Sifting succeeded winnowing, in order to separate the grain from dust and dirt. Amos 9:9.

15. The Fruit Harvests.

With the gathering of the later fruits, the harvests of the year closed. The picked grape clusters that

were to be converted into raisins were dipped in a strong lye and dried in the sun. Grapes to be converted into wine were sent directly to the wine press, where they were trodden with the naked feet, the juice escaping into a vat. Isa. 63:2, 3. The olives gathered generally in November were picked for eating or crushed for their oil. The olive press consisted of a large circular stone hollowed out, the olives being put in the hollowed portion, and crushed by means of another large stone like a grindstone, set upright and moved around by a pole extending through its centre. The grape and olive were the most important fruits of the fruit harvest, and alone paid the tithe, and came under the law of first fruits. Lev. 27:30. The Mosaic law made unclean the fruit of a tree for three years after it began to bear, while the fruit of the fourth year was consecrated to Jevohah, so that not till the fifth year could the owner use the fruit as his own. Lev. 19:23-25.

16. Gardening.

The garden was devoted to flowers, shrubs and fruit trees, not to vegetables. The garden was generally located near some natural spring, and for protection was walled and watched. The best description of a garden is given in Song of Songs 4:12-16; 5:1.

XXVI.-The Commercial Life.

1. The Scriptural Standpoint.

a. The original Hebrew idea of commerce was that of a person going from place to place, trading, trafficing. Still local trade was also carried on to some extent. Land and spices were in earliest times the principal articles of trade. There was a limited trade in slaves. Gen. 37:25-27. Later, grain was imported into Canaan from Egypt and paid for with silver pieces which were weighed. Gen. 42:1, 2.

b. Palestine being such a mountainous country, and having deserts to its south and east, was naturally unsuited to commerce.

c. In addition to the physical character of the country, the religious legislation and institutions of the Israelites did not particularly encourage a commercial life. Trade was legitimate, but was regarded with less favor as compared with shepherding and agriculture.

The reason was evident, because a commercial life brought them into contact with heathen nations, by whom they might become corrupted, as was the case more than once. Isa. 2:6, 7.

2. Trade under the Kings.

a. Before the time of David it was for the most part a home trade, among the Israelites themselves, that was carried on, while only a limited foreign trade was carried on, mainly with Syria, Phœnicia and Egypt. With the extension of the kingdom under David, commerce also-became enlarged.

b. Under Solomon, commerce reached its highest stage. Not only by land, but an extensive maritime commerce was carried on. From Phœnician and Red Sea ports the merchant fleets of Hiram and Solomon sailed to various countries bordering the Indian Ocean and Persian Gulf, for purposes of trade. Naturally foreign traders responded by coming to Palestine and Jerusalem. Moral corruption followed upon this commercial intercourse.

c. The division of the kingdom under Rehoboam

142

acted against foreign trade, which greatly decreased, till finally foreign traders became exceedingly obnoxious in Palestine. Under the Maccabees there was a temporary commercial revival.

3. Transportation.

a. Roads. While foot-paths for men and beasts were for the most part used, still road-building was known, and constructed roads for foot travelers and vehicles were used at an early period. Some of the roads built stretched great distances and were elaborately constructed highways, serving for the passage of armies and chariots. Special instructions were given as to the roads leading to the cities of refuge. Deut. 19:3. Streams were commonly crossed by fording.

b. Traveling. Journeys by water were seldom made. Not only short but very long journeys were made by land. These journeys were commonly made on foot. When animals were used it was generally the ass, sometimes the camel, the latter especially for desert traveling. After the period of the kings, horses were ridden, but as a rule only in war, where also the chariot was used. The chariot was the royal vehicle. Burdens were conveyed on the backs of animals and in two-wheeled carts or wagons. 1 Sam. 6:7, 8.

c. Navigation. No mention is made in the Old Testament of boats on the Sea of Galilee. Navigation, however, was well known to the Hebrews, although infrequently indulged in. The vessels were for the most part merchantmen, a description of which is given in Ezek. 27:5-9, 27, The Book of Jonah likewise furnishes considerable information as to navigation in those days.

4. The Monetary System.

a. Coined money did not circulate among the Israelites before the exile. Uncoined money dates back to the earliest times.

b. Money was weighed. For a piece of land Abraham "weighed to Ephron the silver, four hundred shekels of silver, current *money* with the merchant." Gen. 23:16. Many other instances of weighing money are found in the Old Testament. The word *shekel* means to weigh.

c. The metals most frequently mentioned are silver and gold.

d. These metals as mediums of exchange took the forms of rings, wedges, shekel pieces, etc. Josh. 7:21.

e. Value of money by weight. Silver: 1 Gerah = .0365 cents = 11 grains. 1 Sekah = .365 cents = 110 grains. 1 Shekel = .73 cents = 220 grains. 1 Maneh = \$43.80 and = 13,200 grains. 1 Talent = \$2,190.00 and = about 6 lbs. avoirdupois. Gold: 1 Shekel = \$5.35 and = 132 grains. 1 Maneh = \$535.00 and = 13,200 grains. 1 Talent = \$53,500.00 and = nearly 12 lbs. avoirdupois.

f. Coined Money. Coined money began to circulate in Palestine soon after the Exile. The Persian *daric* mentioned in the Books of Ezra and Nehemiah was worth about \$5.00. The Jewish right to coin money was first given to Simon Maccabæus 143 B. C.

g. Relative worth of money. In Mosaic times a ram was worth about two silver shekels or about \$1.50. The average price for a slave was thirty silver shekels, but Joseph was sold by his brethren for twenty. For the threshing floor of Araunah and two yoke of oxen, David paid, according to 2 Sam. 24: 24 the sum of fifty silver shekels. An imported Egyptian horse in Solo-

144

mon's time cost one hundred and fifty shekels, and a chariot six hundred. Omri bought the mountain on which Samaria afterward stood, for two silver talents, *i. e.* six thousand shekels. In Isaiah's time a vineyard sold for as many shekels as it had vines. Isa. 7:23. In the time of the Judges the wages of a man by the year, including board and one suit of clothing, was ten shekels of silver.

5. Measurements.

a. Measure of length. 1 Finger (width) = .7938 inch. 1 Palm = 3.1752 inch. 1 Span = 9.5257 inch. 1 Cubit = 19.0515 inch. 1 Reed = about 9 feet 6 inches.

b. Dry Measure of Capacity. $1\frac{4}{5}$ Kab = 1 Omer. $3\frac{1}{3}$ Omers = 1 Seah. 3 Seahs = 1 Ephah. 10 Ephahs = 1 Homer. 1 Homer = 86,696 gall. or $10\frac{3}{4}$ bushel. c. Liquid Measure of Capacity. 12 log = 1 Hin. 6 Hin = 1 Bath (ephah) = 8.6696 gall.

d. Measures of distance. The "pace" was about one yard. "Some way" was perhaps about one mile and a half according to the statement in Gen. 35:16. "A day's journey" was thirty miles if travel was unimpeded, and ten miles if it was a large company. Gen. 30:36.

XXVII.-Diseases Mentioned in the Bible.

In the Old Testament little is said as to the treatment, but much as to the prevention of disease. Sanitary laws are laid down in the most specific and detailed form and the Mosaic sanitary code may be said to constitute the basis of modern sanitary legislation. Rules relating to food, clothing, personal cleanliness, intercourse with the sick and contact with the dead. and various matters connected with social life, are given in minute detail.

There appear to be three different means by which, or purposes for which, diseases were inflicted. In some cases they appear to have occurred as ordinary calamities, as in the case of the sun-stroke of the Shunammite woman's child. In some they were inflicted simply as signs, and were of temporary duration, as in the case of the leprosy of Moses. In others they were evidently brought about by direct divine intervention, as a punishment for sin, either of individuals, as in the case of Gehazi's leprosy, or of the people at large, as in the case of the Sixth Egyptian plague of boils and blains.

There can be no doubt that the Hebrews obtained what knowledge of diseases they had mainly from the Egyptians. There can scarcely be any doubt also that their medical and surgical knowledge was brought to greater perfection than is commonly supposed, as recent Egyptian discoveries show that such delicate operations as that necessitated for cataract in the eye were successfully performed about 2000 B. C. by the Egyptians.

The following is a summary of the diseases mentioned in the Old Testament.

1. The Disease of Leprosy.

a. The Biblical pathology of the disease is furnished in Lev. Chs. 13 and 14.

b. The Hebrew name for the disease is Saraath, from a root word whose primary meaning is to prostrate, to throw or cast down, and is referred to diseases that so do. The Greek and Latin term is *lepra* whence we have leprosy. c. A distinction is to be observed, viz. between lepra vulgaris or psoriasis, and true leprosy or elephantiasis Graecorum. The former is a curable, noncontagious skin disease, which in early time was confounded in name with leprosy. The term leprosy is now properly restricted to the disease called elephantiasis Graecorum, or the true leprosy of the Bible.

d. The Biblical disease of leprosy, elephantiasis Græcorum, is one of the most formidable and hopeless of all known maladies. Among its earlier symptoms there is a loss of nervous sensibility and the appearance of circular spots or irregular blotches on different parts of the body. The spots gradually become darker, thickened and rough. Sometimes the blotches turn white. The spots generally coincide with the distribution of the nerves. As the disease advances the numbness and white decay increase in many cases while the joints of the members are dislocated and fall off.

e. The terms used in the Book of Leviticus to denote the appearances or signs of the Levitical disease are, a rising or swelling, a scab or gathering, a bright spot, a somewhat dark (spot), quick raw flesh, a boil or inflamed sore, a dry scall or scurf, a freckled spot or white skin, eruption, while throughout the term "a plague," *i. e.* a stroke or smiting occurs. But from the description of the disease in these thirteenth and fourteenth chapters of Leviticus it would seem that the term leprosy was employed as a generic term, as other words are used to denote, if not varieties, at all events particular aspects of the disease. Besides certain symptoms are described, on seeing which, and after watching their course, the priest declares the patient to be clean or unclean, as the case may be. Thus note Lev. 13:12-14 (R. V.) where we are told that if the "leprosy cover all the skin of him that hath the plague from his head even to his feet, as far as appeareth to the priest, then the priest shall look; and, behold, if the leprosy have covered all his flesh, he shall pronounce him clean that hath the plague; it is all turned white; he is clean. But whensoever raw flesh appeareth in him, he shall be unclean." According to some the former description is that of lepra vulgaris, and therefore the person is pronounced clean; while in the last case the "raw flesh" is a sign of true leprosy and therefore the person is pronounced unclean. According to others, the last point in the above description (raw flesh), seems to indicate a complication of an otherwise non-contagious disease, and therefore the person is pronounced unclean.

f. The earliest Biblical references to and cases of the disease are as follows: Moses, Ex. 4:6. Miriam, Num. 12:10. Naaman and Gehazi, 2 Ki. Ch. 5. Uzziah, 2 Chr. 26:19-21. The four lepers at the gate of Samaria, 2 Ki. 7:3.

g. The discovery of the bacillus of leprosy in 1874 has thrown new light upon the etiology of the disease. The fact that this organism is invariably and exclusively found in the body of lepers, establishes its causal connection with the disease beyond question. It is positively affirmed that leprosy never originates spontaneously, and that the specific products caused by the bacilli alone contain the infectious material by which it is propagated from one individual to another. The contagiousness of leprosy would therefore seem to be a necessary corollary of the demonstration of its

148

parasitic nature. Accordingly, from a scientific standpoint, the conception of leprosy as a parasitic disease is irreconcilable with the theory of its hereditary transmission, a fact confirmed by observation and experiment. As in the case of tuberculosis, with which leprosy presents so many analogies, the influence of heredity exists, but is probably limited to the creation of a predisposition to the disease.

h. For the sanitary and ceremonial regulations and treatment of the disease see Lev. Chs. 13 and 14.

i. Other cutaneous diseases like *lepra vulgaris* or psoriasis are mentioned in Deut. 28: 27, 35 and are as follows: The "botch" (R. V. "boil"), which is identified by some with *elephantiasis*, and by others with *carbuncles*. "Emerods," that is, *hamorrhoidal tumors*. "Scab" (R. V. "Scurvy"), where probably the disease meant is *malignant psoriasis*. "Itch," or some cutaneous disease attended by itching and irritation, as *prurigo*. The "sore botch" or "boil" of verse 35 is probably the same as the "botch" or "boil of Egypt."

2. Plague and Epidemic Diseases.

a. Several Hebrew words are translated "plague," viz. Deber, i. e. destruction, death, applied to pestilence. Magefa, a stroke, i. e. a plague actively considered, a pestilence sent from God. Makkah, also from a word meaning to smite, i. e. the act of smiting, a blow, a stroke. Nagaa, i. e. to touch, smite, used of a spot, mark, cut or the effects of makkah preceding Nagaf, i. e. to strike, as a blow, a plague of divine judgment.

b. Biblical instances of plagues. In Num. 11: 31-34 we have an account of the mortality that fol-

150 OLD TESTAMENT ARCHÆOLOGY.

lowed on the eating of the quails given to satisfy the people's lust for flesh. The free eating of quails or any bird for a month (verse 20) would doubtless be attended with injurious and fatal results. It is known that the quail eats a berry containing prucic acid, and that some indulging largely in quail's flesh have contracted prucic acid poisoning with fatal results. In Num. 16:41-50 just after the destruction of Korah, Dathan and Abiram, we read of 14,700 of the people being destroyed by a plague. What the plague was we are not informed. In 2 Sam. 24: 1-17 is the account of David's making choice from the three forms of punishment offered to him for his numbering of the people. He chose the three days' pestilence which resulted in the death of 70,000 men. The account accords largely with the outbreak and spread of an epidemic disease throughout the land. The description in Zech. 14:12 if it be not altogether metaphorical may describe an army dying of famine. In Ex. 9:8-12 the Sixth Egyptian plague is described as being that of "boils and blains." Boils and carbuncles would probably be a better rendering. It was a cutaneous eruption accompanied by inflammation and breaking out. With the cattle it was probably what is now known as the splenic disease of cattle. In connection with this view, the relation of this to the preceding Egyptian plague is to be noted.

c. Fevers. The different names and forms of fevers are for the most part given in Deut. 28:21, 22, where we have the following classification. First, "consumption," which taken with what precedes in verse 21 may refer to the hopeless, wasting, hectic fever of pulmonary and some other diseases. The second,

"and with a fever," probably denotes, according to the term used, some form of continued or slow fever. The third, "and with an inflammation," according to the Hebrew and Arabic, probably refers to the rigor and following heat of intermittent malarious fever. The fourth, "and with fiery heat" or "extreme burning," probably denotes some of the various forms of cutaneous inflammation, attended by heat and irritation. In Lev. 26:16 mention is also made of some of the above. The fatal disease of King Jehoram described in 2 Chr. 21:12-19 was doubtless epidemic dysentery. The fever and inflammation of the lining membrane of the bowels which attend that disease are often of a very severe character, and marked by such discharges from the bowels as to lead a superficial observer to think that the bowels themselves are cast out.

3. Diseases of the Eye.

The special observances with regard to the blind that are mentioned in the Old Testament, would indicate that they were a numerous class at the time of the Exodus. Indeed it is well known that ophthalmic disease and blindness have always been very common in the East, and are so still. Egyptian ophthalmia has long been known as one of the most severe and destructive forms of inflammation of the eye. Two general kinds of ophthalmic diseases are mentioned in the Old Testament, viz.:

a. Inflammation. Lev. 26:16; Zech. 14:12.

b. Cataract. Lev. 21:20; Zech. 11:17.

The sources of ophthalmic diseases mentioned in the Old Testament are:

a. Miraculous.

b. Congenital.

c. Natural causes; chiefly contagion, and such atmospheric conditions as lead to the contraction of colds.

Biblical instances are:

a. The men of Sodom. Gen. 19:11.

b. The Syrian army. 2 Ki. 6:18.

4. Diseases of the Nervous System.

a. Lunacy and Demoniacal possession. Whether there is in our day such a thing as demoniacal possession, in the sense in which it was understood in Bible times, is difficult to say. Lunacy there is, and in the manifestations of many cases of lunacy there is room for the inquiry as to whether Satanic agency has not some part therein.

b. King Saul's disease described in 1 Sam. 16:14 and what follows, was doubtless melancholia.

c. The disease of Nebuchadnezzar as described in Dan. 4:29-37 was doubtless insanity.

5. Diseases of Individuals in the Old Testament.

a. Disease of Job. From the description given and statements made throughout the Book of Job we must conclude that it was the fatal, loathsome disease of true leprosy, or elephantiasis Græcorum, that afflicted Job.

b. Hezekiah's disease. 2 Ki. 20:1-11; 2 Chr. 32:24; Isa. 38:1-39:1. From the remedy applied it seems to have been a carbuncle. To say this does not in the least detract from the miraculous nature of the recovery.

c. Jeroboam's disease. 1 Ki. 13:4-6. Was doubtless paralysis, probably arising from embolism, and the muscular wasting following on embolism. Embolism, *i. e.* the blocking of an artery by a clot occuring suddenly.

d. Disease of the Shunammite's Son. 2 Ki. 4:18-37.

From the description it was evidently a case of sunstroke, or of sudden meningitis (inflammation of the membranes of the brain) supervening in a delicate child.

e. Disease of King Jehoram, epidemic dysentery. See above.

f. Disease of King Saul, melancholia. See above.

g. Disease of Nebuchadnezzar, insanity. See above.

II.-CIVIL ANTIQUITIES OF THE JEWS.

XXVIII.-Forms of Government.

1. Family Government. The basis and beginning of human government was family government. Gen. 18:19.

2. Patriarchal Government. From family government sprang patriarchal government. The patriarch was the father of his race. His authority was not only civil, but absolute and universal.

3. Tribal Government. As families multiplied and grew into tribes it became necessary to make new provisions. On settling in Egypt the tribes of Israel retained in the main the patriarchal form of government, and accordingly were known as the family or house of Israel. But there was a genealogical subdivision into tribes, families, households or fathers' houses, and individuals, the last *i. e.* individuals including the members of single families, viz. husband, wife and children. This division of the nation is brought out in connection with the account of Achan's [11] 154

sin, Josh. 7:14–18, and also in connection with Gideon's call, Judg. 6:15. In tribal government the head of each family, and the father of each household was supreme within his own circle, while the whole tribe as such obeyed its prince, who originally was the first-born son of its founder.

4. The Eldership. The term "elder," applied first to the aged, then to an office filled by the aged, came finally to designate almost solely an office. The eldership was a ruling class including to a large extent the heads of tribes and families. The title "elder" was given to them when tribal and genealogical distinctions were less in view and the people as a whole were in consideration. Ex. 3:16, 18; 4:29; Josh. 24:31.

5. Representative Government. During the stay in the wilderness the details in the administration of justice became too burdensome for Moses alone, and he therefore appointed seventy elders to be "rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens." The official duty assigned these rulers was to "judge the people at all seasons." Cases too difficult for them were to be appealed to Moses. These rulers were chosen out of the existing organization of the eldership. Most of the public business continued to be transacted by the eldership. After the settlement in Canaan, it was from this body, as previously in the case of the seventy elders, that all new officials were selected. They not only continued to act as national representatives when necessary, but also as local rulers and magistrates.

6. The Shoterim or "Officers." From the signification of the term it would seem that the first duty of these officials was to act as scribes or registrars, keep ing the genealogical tables, etc. Afterwards they performed other duties. They acted as overseers under the Egyptian task-masters; as officers in military affairs and adjutants to Joshua; as functionaries in connection with the judiciary second only to the judges; as officials occupying stations of power in the kingdom.

7. Government by Judges. The Land having been possessed, and notwithstanding the excellent code of laws inherited, there were serious difficulties constantly arising between the tribes, and aggravated and repeated religious relapses from the Lord on the part of the people whereby they showed themselves to be poorly prepared for that self-government implied in the Theocracy. Hence the office of Judge was created. The authority of the Judges was limited in time and scope. They were not strictly rulers, and with most of them the office of Judge was subordinated to that of military leader. The elders still wielded the strongest and most permanent influence in civil affairs. For a Chronological Table of the Judges see Book of Judges under Special Introduction Outlines.

8. The Levites. According to the Mosaic law the Levites were scattered among the tribes. Some of the religious usages required by the law continued to be observed. The national sanctuary was maintained, and for the most part at Shiloh. See § 33, Sacred Persons.

9. Legislation Anterior to the Monarchy. The Mosaic code of laws is both civil and ecclesiastical. These laws cover not only civic and social duties, but they all have a direct ethical and spiritual bearing. These laws are wonderfully comprehensive and complete, variously and fully treating as they do of idolatry; the bearing of false witness; the removal of landmarks; the punishment of unchastity; the treatment of Canaanitish and other heathen cities; the establishment of a judiciary; the number of witnesses required in capital cases; the prohibition of magic arts; the treatment of Hebrew and foreign servants; the usages to be observed in matters relating to food, mourning and blood revenge; the legal process in the detection of a murderer; the course to be pursued in cases of public execution by impaling; the disobedience of children; laws relative to the property of a brother Israelite; kindness to animals; protection of life; regulation of dress; disenfranchisement; fugitive slaves; prostitution; usury; divorce; man-stealing; gleaning; marriage; immodesty; weights and measures; punishments; diseases; laws of inheritance and laws of health, etc.

10. The Kingdom. In Deut. 17: 14-20, the Mosaic code anticipates the kingdom. Full instructions are given for the choice of a king, his title, his income, his government of his household, his relative position among his brethren, his successor, and the conditions under which he shall reign. He was to be one whom Jehovah should choose, and he was to be anointed by Jehovah's prophets. He was to be a shepherd to his people, and like his people he was to be subordinate to the laws of his country. The government was still to remain theocratic, and Jehovah its true king.

11. Inuauguration. At his inauguration the king, surrounded by soldiers, was conducted to a public square or court of the temple where the ceremonial of anointing by the high priest took place. This anointing was in addition to the anointing done by the prophet. The prophet's anointing was merely a symbolical intimation that the person thus anointed should eventually ascend the throne. 2 Ki. 9:3. After the anointing by the high priest the crown was put on the king's head and a copy of the law put in his hand. 2 Sam. 19:10; 1 Ki. 1:39, etc.

12. Succession. The king must be an Israelite. Generally he named his own successor. Otherwise the law of the first-born had its influence. 2 Chr. 21:3. During the minority of a king his mother sometimes held the regency. 1 Ki. 2:19.

13. Functions and privileges. The king acted as commander-in-chief of the army, and performed the duties of a supreme magistrate. He gave decisions on appeal cases, as well as on cases coming to him directly. Apparently he had no special jurisdiction over the national judiciary. He could not repeal laws, but was bound to execute them, especially the laws against idelatrous worship. With the ordinary duties of the priesthood he had nothing to do, although it was sometimes his privilege to nominate the high priest, provided he kept within the line of Aaronic descent. On special occasions he might proclaim a fast. Moreover the kings were continually under the restraints imposed upon them by the order of the prophets, whom they counseled before every great undertaking.

14. Revenues and disbursements. The revenues varied. Much of it consisted of "presents" and tribute. Some of the kings possessed considerable real estate and large herds. The people were strictly assessed only upon extraordinary occasions. Some of the principal sources of the royal income were,—the royal estates; the royal flocks; a nominal tenth of the produce of corn-land, vineyards and sheep; a tribute from merchants passing through Hebrew territory; presents from subjects; tribute from vassals; income from commercial enterprises; the spoils of war; compulsory labor. As an item of daily expense note 1 Ki. 4:22, 23.

15. The Royal Court. The king's household was large. Among the officers were the Chronicler, who recorded the events of history, like Jehoshaphat; the Secretary, who answered letters, petitions and drew up edicts in the king's name, like Elihoreph and Ahijah; the Captain of the Host, who was the general commanding, like Joab; the Chief of the body-guard, an officer of the highest rank to whom was intrusted all delicate and dangerous commissions, like Benaiah; the officer who was over the house, or chief steward, like Ahishar; the royal counselor, like Ahithophel; the king's friend, a more intimate adviser and companion than the counselor, like Zabud; the officer of finance who attended to the raising of levies for the public service, like Adoniram, etc.

16. The Disruption and Fall of the Kingdom. With the accession (973 B. C.) of Rehoboam, son and successor of Solomon, the kingdom became divided into the Northern Kingdom of the Ten Tribes with its capital at Samaria, and the Southern Kingdom composed of the tribes of Judah and Benjamin with its capital at Jerusalem. The Northern Kingdom lasted about 250 years, when Samaria capitulated to Sargon and a large number of Israelites were carried away as captives to Assyria. Less than a century and a half later the Southern Kingdom of Judah fell and also went into captivity. The captivity lasted until the accession of Cyrus to the throne of Babylon, B. C. 536. By him and his successors the Jews were allowed to return to Palestine. The first company, numbering about 50,-000, returned under the leadership of Zerubbabel, who was appointed governor by the Persian monarch. Under Artaxerxes I. twenty-eight years later, a second company returned under the leadership of Ezra. Nehemiah came fourteen years later, B. C. 444.

17. Government after the Exile. Most of the captives who returned belonged to the tribes of Judah and Benjamin. A few belonged to the Ten Tribes. During the Persian period, 536–333 B. C. the province of which Judæa formed a part was under an officer called a satrap. Smaller districts, like Judæa itself, were ruled by governors, like Zerubbabel, Ezra and Nehemiah. Tribute was paid to the Persian monarchs.

XXIX.-Judicial Courts and Processes.

1. At the first judicial sentence was pronounced by the ruler, who was also judge, and who acted as God's vicegerent. Deut. 19:16, 17.

2. As the people, and consequently judicial cases multiplied, Moses appointed a Court of Seventy, elders, to consider less important cases. Those composing this court were named by the people and inducted into office by Moses. While the first duty of this court was to act on judicial cases, still they also constituted a military board, as they are spoken of as being heads over tens, fifties, hundreds, etc. The only appeal from this court was to Moses, to whom the case was carried up by the judge, not the people.

3. When the above method (2) of judicial procedure

159

160

had fulfilled its purpose another became adopted and is described in Deut. 16:18-20; 17:8-13. Instead of the Court of Seventy, there are judges and assistants who like the Court of Seventy are to be selected from the elders of the people. From this tribunal cases of appeal were carried to the priest or judge of the time.

4. The next change in the judiciary occurred during Jehoshaphat's reign (B. C. 912-895), and is described in 2 Chr. 19:5-8. This court was different from the preceding court in that it was composed of priests and Levites instead of Levitical priests alone; in that it had a civil and ecclesiastical head acting at one and the same time, instead of independently; and in that the civil head was represented by a family chief of Judah (an entirely new officer), and was supported by the chief of the fathers of Israel.

5. In dispensing justice legal processes followed the Mosaic law. When the Mosaic law did not furnish rule or precedent it was left to the impartiality of the judge. A thorough and detailed examination of a case was necessary. In capital crimes there must be two or three witnesses. Perjury was severely punished.

6. Trials generally took place near the principal gate of the city. In Jerusalem they were held in front of the temple; sometimes the court of the palace, when the king was to pronounce sentence. The trial was public and for the most part conducted orally. The litigants appeared in person and pleaded their own case before the judge. In cases of capital crimes the complainant stood at the right of the accused. Testimony must consist of facts. Circumstantial evidence was of value simply to help the judge when he had nothing else to go by. In the case of a disobedient son the complaint of *both* parents was sufficient evidence. Witnesses were put under oath. Lev. 5:1.

7. In reaching a decision it was not permitted to torture a witness. Casting the lot was sometimes practiced in early times to obtain a decision. Prov. 16:33.

8. Decisions were handed down both orally and in writing. The penalty was inflicted at once and in the presence of the judges, unless it was a capital crime. The death penalty was inflicted by the community. The usual method of putting to death was by stoning. In the case of manslaughter the guilty person was delivered to the Goël, or avenger of blood for execution. Kings could at once put to death those so condemned. The prophets complained of the corruption of justice by kings and judges. Cases relating to property, rights, etc., were generally settled out of court, by mutual agreement.

9. Two things served to modify penalties. On the one hand the institutions and customs handed down by the past gave a peculiar form to some penalties. On the other hand, the fact that the national government was theocratic, rendered some punishments more severe than otherwise might be expected.

10. The death penalty was inflicted for various crimes, viz. wilful murder; perjury that endangered the life of another; smiting, cursing, or persistent rebellion against one's parents; man-stealing; marital unfaithfulness and other similar sins; idolatry; witchcraft; pretending to prophetic inspiration; Sabbath breaking; defying the decisions of the courts. The enormity of a crime was increased by the fact that the nation was theocratic. The death penalty, generally inflicted by stoning, was sometimes inflicted by sword or spear. Sometimes the body after stoning was burned or hung.

11. In case of honicide, the next of kin to the murdered man slew the murderer wherever found. This leading to abuses, Moses provided for six cities of refuge, three on each side of the Jordan, to any one of which the person suspected of murder might flee. Here he was safe till his case was tried. Then, if guilty, he was handed over to the next of kin for execution.

12. Other forms of punishment were the following: Mutilation, which was very rare, Deut. 25:11, 12; flogging, which was quite common, and administered by a rod or whip of leathern thongs; fines, mostly for offences against property, and generally ranging from one hundred shekels down; and imprisonment, which was rare, as a method of punishment, before the exile, more common after that. A peculiar mode of punishment was the ban, applied both to persons and things, and by which the person or thing was devoted to God, originally in the sense that it was to be destroyed. Indestructible things, like silver and gold, were confiscated for the sanctuary. During the exilian period, the ban took the form of excommunication.

13. In regard to property laws:—the land of Canaan having been divided among the twelve tribes, there was assigned to each family in a tribe, as its own, a proportionate part of this inheritance. Two principal laws underlay this ownership of land. First, it was authenticated by God, in whom the real proprietorship inhered; and, second, it could not be permanently alienated or lost, but its possession was insured to the

162

OLD TESTAMENT ARCHÆOLOGY.

family as long as the Hebrew commonwealth lasted. In case of any voluntary disposition of land on the part of the owner, it necessarily reverted to him again in the year of jubilee. The year of jubilee followed the seventh successive sabbatic year, that is, was celebrated every fifty years. On the year of jubilee, as on sabbatic years, the land was left uncultivated, but what it spontaneously produced was free to all. The year of jubilee effected also the enfranchisement of all slaves, and all servitude for the liquidation of debt. From the above it will be seen that another factor entering into the valuation of land was its proximity to the year of jubilee. In walled towns real estate sold by an owner must be redeemed within a year if at all. On the other hand, Levitical cities and all property in them came under the law of the year of jubilee. Land in the suburbs of such cities could not be disposed of in any manner. If a man dedicated property to the Lord he could redeem it before the year of jubilee by adding a fifth of its value as reckoned by the number of crops it would produce before that time. On the principle that God was the real owner of all land, the occupant was simply a tenant who must account to God. Hence the offerings of the land to God, to the poor, and for the priests and Levites.

14. In earlier times business transactions involving the transfer of property were conducted orally; later written contracts, prepared in duplicates, and signed by principals and witnesses, came into use.

15. The Mosaic law furnished a number of enactments for the security of property, as over against the infringement of landmarks, the injury of crops, herds, etc.

163

OLD TESTAMENT ARCHÆOLOGY.

XXX.-Military Affairs.

1. According to the Old Testament, war was to be undertaken only on God's command; was to be waged only against those who proved themselves the persistent enemies of God and his people; was to be commenced with religious rites; and was to be conducted under strict rules of discipline written down in detail on the national statutes.

2. There was a difference between the Canaanitish wars of extermination, and the wars waged by the Hebrews subsequent to that. The war against the Canaanites was offensive; was a war against heathenism in its most pronounced form, was a war against persistent idolatry and idolaters, from which the land must be freed if the Hebrews, as God's people, were to occupy it. After that all the wars waged by Israel were to be and were of a defensive character.

3. The Origin and Constitution of the Army. The division of the people in the wilderness into companies of tens, fifties, hundreds, etc., having reference originally to civil matters, became afterwards the basis of a military organization. The rulers of the companies acted as "captains" and "officers of the host," as in Num. 31:14. All males over twenty years of age were liable to military duty. Lists of such persons were kept. Those who kept these lists, i. e. the Shoterim, had the power to retain in or dismiss from service; to divide the army into companies and battalions; to bring them into battle front before the enemy; and to appoint the leaders. A priest was always present at the mustering of the army to encourage the soldiery, and assure them that the Lord fought with them against

the enemy. At first the army was composed entirely of infantry. David was the first to make a change, and Solomon the first to establish a distinct cavalry.

4. The Hebrew Arms in Canaan. The army was summoned by messengers, by a trumpet, or by signal-fiags. In early times only a sufficient number of men to accomplish the purpose were called out, and these from adjacent tribes. In early times also, before any military operations were undertaken, counsel was asked of God through a prophet or through the Urim and Thummin. Sacrifices were sometimes offered. Till David's time the ark went with the army. First in the time of Saul we find a small standing army. This was gradually increased in later periods. Over the whole army was a commander-in-chief.

5. The Battle. Before the battle a conference was generally held to reach a settlement without a resort to arms. Arbitration failing war was formally declared. The army was then put in battle order, the rear being protected. Various methods of attack were adopted. Fighting was mostly hand-to-hand. Victories were celebrated. The beginning and close of an engagement was signalized by the blast of a trumpet.

6. Weapons. Among weapons of defence the shield is most frequently mentioned. It was of two kinds; one small and light, the other sufficiently large to protect the whole body. The material was for the most part hide, sometimes ornamented, Nah. 2:3. When not used the shield was covered and kept in an arsenal. Shields were sometimes displayed as signs of possession, of power, and carried in processions. The helmet is rarely mentioned in the Old Testament. Uzziah, B. C. 808, was the first to provide the Israelitish army

with helmets. The helmet was generally a leather cap covered with strips of metal. The coat of mail was a garment like a shirt covered with metal scales. Greaves, or armor for the legs, are only mentioned in the Old Testament in connection with the account of Goliath. Assyrian soldiers wore an armored stocking or leathern boot mentioned in Isa. 9:5. The principal offensive weapons were the bow and arrow, and sling for distances, the sword, spear and lance for hand-tohand fighting. Bows were made of wood, copper and bronze. The Benjaminites were noted as bowmen. Strings were made from the intestines of animals. Arrows were of wood and reed, tipped with metal or The sling is first mentioned in Judg. 20:16 stone. where again the Benjaminites are prominently mentioned. There were companies of slingers in the army. The sling was a strip of leather or other strong material, wide in the middle, narrow at the ends. The sword was both straight and curved, long and short, single and double-edged. The material was generally The hilt was ornamented, the sword was carried iron. in a sheath, and worn on the left side. The spear like the bow was carried both by officers and common soldiers. Two kinds of spears are mentioned, the difference being in weight and length, the one used for thrusting, the other for hurling. The javelin was like the spear only lighter. Battle-axes and hammers were also used.

7. The Chariot,—was two-wheeled, drawn by at least two horses, or, if more, they were still harnessed abreast. The body, often ornamented, was placed on the axle-tree, the weapons being attached to the sides of the chariot. The chariot was generally occupied by the charioteer and the warrior. The horses were richly decked. Entrance to the chariot was from behind.

8. Cities were strongly walled and massively gated for defence in time of siege. In addition to a wall or walls, a moat or ditch surrounding the city rendered assault more difficult. Elevated spots of ground were taken advantage of. Fortresses were also built in outlying districts. A city refusing to surrender was assaulted or siege laid to it. Walls were scaled by means of ladders, etc. to overpower the defenders. In case of siege, communication was first cut off. Offensive operations were carried on by means of undermining, the battering ram and the movable tower. Isa. 23:13. The besieged victualled the city, strengthened the walls, and replied to the attack by arrows, sticks, boiling water or oil, and large stones. Sieges were often of long duration, e. q. that of Samaria by the Assyrians three years, and that of Jerusalem by the Babylonians a year and a half.

III.-SACRED ANTIQUITIES OF THE JEWS.

XXXI.-Sacred Seasons.

1. The feasts of the Hebrew year instituted to be observed by Israel receive treatment in the following passages:—Ex. 12:1-28, 43-51; 13:3-10; 23:14-19; 34:18-26; Lev. Ch. 23; Num. 9:5-14 and Chs. 28, 29; Deut. 16:1-17. The Book of Leviticus gives a list of all the festivals of the Hebrew year, with an account of the special ceremonies accompanying them, while the Book of Numbers tells what sacrificial offerings were appointed for each.

2. There is a twofold classification of the Hebrew feasts. It is to be remembered that the passover and the feast of unleavened bread, being celebrated at the same time are regarded as one. These three festivals then,—the Passover including the feast of unleavened bread; Pentecost or the feast of harvest; and Tabernacles or the feast of ingathering, are distinguished from the other feasts in that they could only be observed at the central place of worship where it was necessary for every male Israelite to appear in order to celebrate them. In this way these three annual feasts came to be called *Haggim* or "pilgrimage feasts," in distinction from the others, the so-called *Moadim* = set times.

3. All the Hebrew feasts are closely connected with the history of the Exodus, with the agricultural year, and with the institution of the Sabbath. Thus the Passover, with which the list of feasts naturally begins, looks back to the exemption from death of the firstborn of the Israelites when those of the Egyptians were slain. The agricultural year likewise modified to some extent the number, order and character of these feasts. So the Passover, the first feast historically, came at the time of barley harvest with which the harvest season in Palestine opened; and Pentecost, seven weeks after the Passover, came at the beginning of wheat harvest. Finally, there was a still more intimate connection between these feasts and the institution of the Sabbath. The Sabbath was the standard by which the entire series of festivals was to be governed and characterized.

4. The Sabbath. The Sabbath is one of the primitive institutions of the race, and a fundamental institution with the Hebrews. In Gen. 2:2, 3 we have its consecration and reason for its observance, observance by all. Afterward an added and a national reason was assigned in the decalogue for its observance, viz. because Jehovah had brought them out of the land of Egypt. Moreover the Sabbath was the unit of measure giving a sacred character to every other division of time. The period of the week, having its culmination in the seventh day, was made the basis of the system. The Hebrew feasts as a whole, and individually were arranged with reference to the recurrence of the Sab-Accordingly the feasts of unleavened bread bath. and tabernacles lasted each seven days. Each began on the fifteenth of the month, i. e. at the end of two weeks and when the moon was full. Pentecost occurred seven weeks after the Passover, i. e. seven periods of seven days each. As the seventh day was sacred, so was the seventh month, and seventh year, *i. e.* the Sabbatic year. And so again the fiftieth year, which followed seven periods of seven years each, was also sacred, viz. the year of Jubilee.

5. The Passover. The Jewish ecclesiastical year opened with the celebration of the Passover, which was appointed for the fourteenth of Nisan, the old Hebrew month of Abib, and corresponding nearly to our month of April. The observance of this feast commemorated the passing over by the angel of death of the first-born of the Israelites when the first-born of the Egyptians was destroyed. Ex. 12:13. On the tenth day of the month a lamb was to be chosen by

[12]

each family of Israel, or if the family was too small two or more families might unite in the celebration. The lamb was to be an unblemished male of a year old, and taken either from the sheep or the goats. It was to be killed on the evening of the fourteenth, and eaten the same night, the flesh having been roasted or boiled. With it might be eaten unleavened bread and bitter herbs (§ 16:2), but nothing more. Not a bone of the animal was to be broken, and the parts not eaten were to be burned the same night. The manner of eating the Passover is given in Ex. 12:11. A foreigner could not participate in the Passover unless he had been circumcised, and no part of the animal could be carried outside the house where the celebration took place. After its first celebration several modifications took place in the manner of the observance of the Passover, modifications looking forward to the Thus it was prescribed that all residence in Canaan. males at least should go up to the national sanctuary to eat the Passover. At the same time each was to provide some offering. In the first celebration the blood of the slain animal was sprinkled by means of a branch of hyssop on the lintel, or upper casing, of the door of each house and its two posts, where the celebration took place, whereas after that the blood was sprinkled on the altar, and there the fat was consumed. In connection with its first observance a journey was undertaken the following day, after that the following day was, like the Sabbath, kept holy.

6. The Feast of Unleavened Bread. The feast of unleavened bread followed immediately the passover. Indeed the paschal lamb was eaten at the beginning of the first day of the feast of unleavened bread, the fif-

teenth of Nisan, the Hebrew day being reckoned from evening to evening. Observed simultaneously the two feasts came to be called by the same name. The legislation relative to the feast of unleavened bread is found in Ex. 12:15-20; 13:3-10; Lev. 23:6; Num. 28:17; Deut. 16:8. The feast receives its name from the fact that only unleavened bread was permitted to be eaten during that time, viz. from the fifteenth to the twenty-first of the month Nisan. Its name, the "bread of affliction," has no reference to the bread, but is simply symbolical of the sufferings in Egypt, and the haste with which Egypt was left. The feast was one of joy like the passover. The manner in which the day of this feast was to be observed is laid down in Num. 28:19-24. Besides the sacrifices there specified there were to be also individual offerings according to Ex. 23:15. The first day of the feast was to be kept especially sacred, was therefore called "Sabbath," and is referred to in Lev. 23:11. The following day a sheaf of barley was waved in the sanctuary announcing the opening of harvest, all harvesting of grain before that time being unlawful.

7. The Feast of Weeks, or Pentecost. Treating the passover and the feast of unleavened bread as one, the second great pilgrimage feast was the feast of weeks, or pentecost. It came fifty days after the feast of unleavened bread, hence called *pentecost*; and this period embraced seven weeks of seven days each, hence called *weeks*. The count is made from the day the barley sheaf was waved in the sanctuary. This feast was also called the "feast of harvest," as it opened the wheat harvest with which the whole harvest of grain drew near its close. It was also called "day of first

fruits" from the requirement to make in it an offering of bread from the wheat. The offerings for pentecost were two young bullocks, one ram, and seven lambs of the first year, with their meal offerings, and a kid of the goats for a sin offering. These were additional to the regular daily sacrifices, and to the sacrifices made in connection with the presentation of the new flour which was in the form of two wheaten loaves or cakes, these sacrifices being seven lambs of the first year, one young bullock and two rams, for a burnt offering,together with their appropriate meal offering, --- a kid of the goats for a sin offering, and two lambs of the first year for a sacrifice of peace offerings. The wave loaves of pentecost were leavened, as was all bread offered in connection with thank offerings. Being public offerings, one each of the two wave loaves and two lambs was given to the high priest, the rest being the share of the other priests of the sanctuary. The fat of both lambs was consumed on the altar. The remaining flesh was eaten at a sacrificial meal within the temple, none of it being allowed to be left over beyond the following midnight. The public sacrifices of this and succeeding days were followed also by private individual offerings.

8. The Feast of Tabernacles. The feast of "tabernacles" or "booths" was the last of the pilgrimage feasts. Like the passover, it lasted seven days, from the fifteenth to the twenty-first of Tishri, the seventh month of the Jewish ecclesiastical year. It was instituted in part to remind the people that their fathers had lived in tents in the wilderness, Lev. 23:40-43, and in part to be an occasion of annual thanksgiving after the ingathering of the harvests of the year.

From its importance it came to be called "the feast," and "the feast of Jehovah." An eighth festival day followed, but it had a different significance. The people no longer dwelt in booths or tents. The offerings and the temple service were changed. It was not simply a closing day to the feast of tabernacles, but a closing day to all the festivals of the year. But on account of its close connection with the feast of tabernacles, the latter came to be called an eight day feast. On the institution and nature of the feast note Lev. 23:33-43; Num. 29:12-38. Each day of the feast had its burnt offering and sin offering. In respect to the burnt offering it is noted that from the first day to the last, the number of bullocks offered was to be one less each day, while the number of lambs and rams of a year old was to remain the same. On the first day there were sacrificed thirteen bullocks, two rams and fourteen lambs, together with the appropriate meal offering. As in the case of the other feasts these offerings were in addition to the daily morning and evening sacrifice, and on the Sabbath to the sacrifices for that The sacrifices of the eighth day were also inday. creased, while all the sacrifices throughout the week were accompanied with trumpet blasts and singing. A post-exilian feature of the celebration of the feast was the ceremony of bringing water from the pool of Siloam to the temple where it was offered amid the chanting of the words of Isa. 12:3.

9. The New Moon. The two remaining festivals of the Mosaic law are those of the New Moon and the Atonement. The latter was strictly a fast, the only fast required by the Mosaic law. The feast of the New Moon is also sometimes called "the feast of trumpets." The trumpets however were not only blown at this feast but at others also. Num. 10:10. With the exception of the new moon of the seventh month, the law required only the offering of special sacrifices and the blowing of trumpets on the day of the moon's reappearance. The new moon of the seventh month was celebrated with an increased number of offerings and the blowing of trumpets. After the exile this feast partook of the nature of a new year's celebration. The appearance of the new moon was ascertained by actual observation, not by astronomical calculation.

10. The Day of Atonement. The day of atonement fell on the tenth day of the seventh month. Atoning sacrifices were offered for the sins and uncleannesses of the people as a whole, and for the purification of the temple throughout. Offerings for sin were made at other times, but in order to secure to a greater extent on the part of the people a due remembrance of sins year by year, one entire day of each year was set apart for humiliation and confession. Accordingly it was a fast instead of a feast, the only fast prescribed. On this day alone the services of the sanctuary extended into the holy of holies. On other days the high priest might or might not participate in the services of the temple, but on this day he alone could officiate, the other priests simply acting as assistants. Moreover the high priest was obliged on this day and in certain ceremonies to put off his ordinary golden vestments and clothe himself in garments of white linen. On this day, and in addition to the daily morning and evening sacrifices, there was a burnt offering of a ram offered in behalf of the priesthood, a young bullock, a ram and seven lambs of the first

year, with their meal offering in behalf of the people; a kid of the goats for a sin offering; and the purely expiatory sacrifices of the day, viz. a young bullock for the priesthood and two goats for the people. Ex. 30:10; Lev. 16:1-34; 23:26-32; Num. 29:7-11. One of the two goats was killed and its blood sprinkled on the altar; the other, bearing symbolically the sins of the people, was sent into the wilderness. One of the goats was understood to atone for the people by its blood; the other which was said to be "for Azazel" (dismissal), set forth the effects of such atonement symbolized the total removal of guilt.

11. Purim. The feast of Purim and the feast of Dedication were two feasts of later times. The feast of Purim, called also the "day of Mordecai" in the Apocrypha, fell on the fourteenth and fifteenth of Adar, the last month of the Jewish ecclesiastical year. The feast was established by Mordecai, and commemorated the deliverance of the Jews from the destruction threatened by Haman, prime minister of the Persian empire in the reign of Xerxes. The name *Purim*, meaning "lots" was given to the feast because it was by lot that Haman decided to destroy the Jews on the thirteenth day of Adar. Esth. 3:7-13; 9:24-27. The feast lasted two days.

12. The Feast of Dedication. This feast dates from the reconsecration of the altar and the temple at Jerusalem after their defilement by Antiochus Epiphanes. The feast began on the twenty-fifth of Chislev, corresponding to December, and lasted eight days. It resembled the feast of tabernacles.

OLD TESTAMENT ARCHÆOLOGY.

XXXII.-Sacred Places.

1. The Tabernacle in General. At Sinai God commanded Israel to prepare a place for his dwelling. The tabernacle was the result. It was the first historic sanctuary of Israel. The different names applied to the tabernacle and setting forth its character and purposes are "tent," "tent of meeting," "tent of witness," "abode," "sanctuary," "palace," "temple." The details of the plan of the tabernacle are given in Ex. Chs. 25–31. The record of the actual carrying out of the plan of building the tabernacle is furnished in Ex. Chs. 35–40.

2. The Court of the Tabernacle. It was rectangular in form, 100 cubits long, 50 cubits wide, the cubit being about a foot and a half. It was enclosed by a row of wooden pillars on which was hung a canvas curtain. Each pillar was five cubits high, and the space between them was also five cubits. The difficulty encountered by some to place sixty pillars (the number given in the Bible) around this court with twenty on each side and ten on each end, will be entirely obviated, if, according to the Oriental method, still in practice, they read and count spaces between pillars instead of pillars. The sockets of the pillars were bronze or copper and the top overlaid with silver. The fine-twined linen curtain or screen was hung to the pillars by silver rods and hooks. This screen was unbroken except at the entrance on the eastern side, where there was another curtain twenty cubits wide of more elaborate workmanship. In the court of the Tabernacle were the altar of burnt offering, the laver, and the Tabernacle proper.

3. The Altar of Burnt Offering. It stood in the court, toward the east, in front of the entrance, and was a square, hollow structure, measuring three cubits high, and five cubits each side, and was built of acacia wood overlaid with bronze or copper. Note further Ex. 27: 1-8; 20: 24-26.

4. The Laver. Stood also in the court between the altar of burnt offering and the tabernacle proper. It was a round brazen vessel containing the water used by the priests in cleansing themselves before entering the holy place or offering sacrifice. Ex. 38:8.

5. The Tabernacle Proper. It was a rectangular structure thirty cubits long, ten wide and ten high. The sides were composed of forty-eight gilded acacia wood boards, forty on the north and south sides, eight on the west. Note further Ex. 26:15–30. One-third of the tabernacle inclosure (that on the west side) was set apart for the "holy of holies." It contained the ark with its furniture, the mercy seat and the tables of the law. It was an exact cube, being ten cubits broad, long and high. The other two-thirds of the space of the tabernacle constituted the "holy place." It contained the golden candlestick, the table of shewbread and the altar of incense.

6. The Holy of Holies. It was separated from the holy place by a veil. For description and contents see Ex. 26:31-37 and above, No. 5.

7. The Covering of the Tabernacle. It was of four kinds. The first covering is described in Ex. 26:1-6. The second covering, intended to be a tent over the tabernacle, was of goat's hair. See further Ex. 26:7-13. The other two coverings are mentioned in Ex. 26:14, *viz.* "rams' skins dyed red, and a covering of sealskins

above." Instead of "sealskins" or "badger skins," read *porpoise skins*. (See § 17, Badger.) These two coverings probably consisted of an actual tent made out of these two kinds of skins and pitched over the tabernacle.

8. The Ark. Within the Holy of Holies was the "ark of the covenant," so called because it contained the two tables of stone. It was an acacia wood box, overlaid throughout with gold, and measuring 24 cubits long, $1\frac{1}{2}$ cubits high and wide. It was carried by means of staves inserted through rings at the four corners. Around the top was a gilded rim or moulding, and the lid, which was called the "mercy seat," was of solid gold. On each end of this lid, and of one piece with it, was set the figure of a cherub, made from beaten gold. The two cherubim faced inward and covered the mercy seat with their wings. This was the most holy place of the sanctuary, which the high priest alone could enter, once in the year, and then only amidst clouds of incense. Ex. 25:22. Besides the tables of stone, there were at one time by the ark a pot of manna, and Aaron's rod that budded. These were probably lost when the ark was in the possession of the Philistines. and the ark itself probably destroyed when Nebuchadnezzar took Jerusalem.

9. The Alter of Incense. It was nearest the veil just outside the Holy of Holies. Being overlaid with gold it was also called the "golden altar." See further Ex. 30:1–10, 34–38.

10. The Table of Shew-bread. For its construction and vessels see Ex. 25: 23–30. Every Sabbath twelve loaves of bread, covered with frankincense, called "shew" or "presence" bread were placed upon the table. On the following Sabbath they were removed, and others substituted. The incense was burned, the bread eaten in the sanctuary by the priests.

11. The Golden Candlestick. Its description is given in Ex. 25:31–40. The holy place being without natural light, the immediate object of the candlestick was to give light to the priests in the performance of their duties. Doubtless it had also a symbolical significance. Isa. 10:17, etc. See further Ex. 27:20, 21.

12. The Temple of Solomon. David for the most part collected the materials out of which his son and successor, Solomon, built the temple. Solomon began its erection in the fourth year of his reign, he having ascended the throne 1013 B. C. He was greatly helped in the building by Hiram, King of Tyre. The temple was built on Mount Moriah, which lay eastward from Mount Zion and originally outside of the city's walls. It was completed in seven years. The ground plan of the temple resembled the tabernacle, but with double its dimensions. The main building was similarly divided into the holy place and the holy of holies. The entrance to the temple was from the east between two pillars named, the one on the right Jachin, the other Boaz. A row of chambers three stories high was attached to the outside wall of the main building on three sides. The temple and probably the chambers had windows, but in the former for the purpose of ventilation rather than light, light being obtained from the golden candelabrum. The temple, like the tabernacle, had an enclosure or court around it, and called the "inner court," the "court of the priests" and the "upper court." There was an outer court also surrounded by a wall. The walls of the temple were of

The roof was made of beams and boards of stone. The interior walls were wainscoted with boards cedar. of cedar, exquisitely carved, and overlaid with gold. The floor was of cypress wood overlaid with gold. The oracle or holy of holies was separated from the holy place by a partition of cedar boards, in which was a two-leaved door of olive wood, which turned on golden hinges. In point of furniture Solomon's temple differed from the tabernacle in the number and size of the pieces. Thus there were two additional and much larger cherubim of carved olive wood overlaid with gold. There were ten tables of shew-bread and ten candlesticks instead of one. The brazen altar of the temple was much larger than that of the taberna-Instead of the small laver of the tabernacle, the cle. temple had the molten sea and ten lavers besides. Solomon's temple, after standing four hundred years, was destroyed by the army of Nebuchadnezzar, under Nebuzaradan, in the eleventh year of Zedekiah, B. C. 587.

13. The Temple of Zerubbabel. Was built by the exiles who returned from Babylon, and finished 516 B. C. It was captured and plundered by Antiochus Epiphanes, B. C. 168, but was retaken and rededicated by Judas Maccabæus three years later. Pompey captured the building when he took Jerusalem, B. C. 63. It occupied the same site and was about of the same dimensions as Solomon's temple, but less elaborately furnished.

14. The Synagogue. The word synagogue comes from the Greek, and literally means a gathering together. As an institution the synagogue is of postexilian origin. A fundamental idea in its institution was a place to give instruction, even more than a place of worship. Ten men in any community were a sufficient number to form a synagogue. In large cities there were many. They exercised not only religious, but to some extent civil jurisdiction over their membership. In communities altogether Jewish, the entire civil authority was lodged in them. Each synagogue had its ruler or rulers besides a number of minor officials who cared for the building and assisted in its religious services.

XXXIII.-Sacred Persons.

1. Israel—Levi—Aaron. The divine intent was that all Israel should be a nation of priests. As Israel failed to realize this high calling, a single tribe of Israel was set apart to divine service, in the priesthood, the tribe of Levi. The tribe of Levi with its cattle was chosen instead of the first-born of man and beast from all the tribes, as Jehovah had at first designated, in due recognition of his mercy in exempting the first-born of the Israelites from the death of the last Egyptian plague. But as the tribe of Levi did not number as many as the first-born of all the tribes. it was required that for the remaining 273, five shekels apiece should be paid into the sanctuary, and this sum continued to be the price paid for the redemption of the first-born of man and beast. Ex. 13:2: Num. 3: 11-51; 8:14-18. The tribe of Levi having been divinely set apart for the service of the sanctuary, a further distinction was made in the tribe itself. Part of it, Aaron and his sons, were appointed priests, and the rest to be their attendants and ministers.

2. Consecration of the Levites. The form for the consecration of the Levites was simpler than in the case of priests, Num. 8:6-21. First they were sprinkled with the "water of explation," after which their clothing was washed and their persons bathed and shaved. Representatives of Israel then laid the hands upon their heads, after which Aaron offered them "for a wave offering before the Lord," *i. e.* led them toward the altar and back again. The ceremony concluded with offering two young bullocks, one a sin offering, the other a burnt offering.

3. Duties of the Levites. Their special duties as distinguished from the priests are given in Num. 3:6-10; 18:2-6.

4. Qualifications for the Priesthood. Descent from Aaron gave a hereditary right to the priesthood. But other qualifications were also necessary. The age required was probably thirty. The person must be without serious physical blemish. Lev. 21:17-23. While officiating the priest was not permitted to indulge in wine or strong drink. He was not allowed to defile himself by touching a dead body except in case of near relatives. He should marry only a virgin of Israel. He must not disfigure himself in mourning.

5. Consecration of Priests. The ceremony for the consecration of the priest is given in Ex. 29:1-44; Lev. 8:1-36; see also Ex. 40:12-15. The services of consecrating Aaron and his sons as priests lasted seven days. The ceremonies of each day were about the same. The steps in the first day's ceremony were,—washing; clothing in the holy garments; anointing; offering of sacrifices by Moses, who took of the victim's blood and put it on the tip of Aaron's right ear, right

182

thumb, and great toe of right foot, to indicate the completeness of the consecration; and concluding with Moses sprinkling the blood of the victim, mixed with anointing oil, upon the garments of Aaron and his sons. The anointing oil was composed of myrrh, cinnamon, cassia and calamus, mixed with pure olive oil.

6. Duties of Priests. They were to offer the sacrifices; mediate between God and the people; receive the people's offerings; bless them in the Lord's name; offer incense morning and evening; attend to the golden candlestick and keep it in oil; renew the shewbread; keep the interior of the sanctuary clean; furnish a guard at its entrance; keep a fire burning on the altar of burnt offering; have the oversight of the Levites who were not permitted to come near the vessels of the sanctuary; decide as to the worthiness of animals for sacrifice; examine and instruct lepers; prescribe the services required in all cases of ceremonial purification taking place at the sanctuary; act as teachers; have charge of the rolls of the law; judge in controversies, etc. The high priest might do as little or as much as he chose of the priestly service. But he had his own peculiar duties outside of this. He had the oversight of the sanctuary. Only he could officiate on the day of atonement. On the occasion of the installation of Aaron and his sons he was to offer, morning and evening, the appointed daily meal offering.

7. Divisions of Priests and Levites. David divided the priesthood into twenty-four classes, each class representing a family, sixteen of the families being from the line of Eleazar, eight from the line of Ithamar. They alternated by families in temple service. David also divided the Levites into twenty-four classes, who in addition to their ordinary duties acted as singers, musicians, secretaries, trustees of sacred funds, etc. Most of the Levites continued simply to serve the priests.

8. Priestly Dress. The official dress of the ordinary priest as specified consisted of a tunic, trousers, girdle and turban. The material was linen bysus, the color white.

9. High Priest's Dress. The tunic and short trousers were the same as the priests'. The girdle was white bysus embroidered with the three colors of the sanctuary, blue, purple and scarles. The turban was a long strip of bysus wound around upon itself. The "robe of the ephod," worn over the tunic, was of bysus, blue in color, sleeveless; reaching to the knees. The ephod itself was bysus interwoven with gold, blue, purple and scarlet threads. It probably consisted of two pieces to cover the front and back of the body, and reaching from the shoulder to the thighs; a girdle binding it to the body; and two shoulder-strips on each of which was an onyx stone or beryl set in gold, and engraved with the names of the tribes. The breastplate of the hight priest is described in Ex. Chs. 28 and 39. The Urim and Thummin were to be put in or assigned to the breastplate, and by means of them divine decisions respecting Israel were in some way reached. On the front of the mitre or turban was a golden plate inscribed "Holy to the Lord."

10. Support of Priests and Levites. All Israel owed tribute to God. This tribute God relinquished in favor of the tribe of Levi including Aaron and his sons. A tithe, *i. e.* a tenth of their income was to be sacredly

set apart by all the remaining Israelites for the Levites. This was their chief support. In addition to this the Levites had forty-eight cities assigned them to dwell in, as they did not inherit land like their brethren. (See § 34.) They also had $\frac{1}{150}$ part in the spoils of war. Out of their tithe the Levites were required to give in turn a tithe to the priests. A second tithe was enjoined in Deuteronomy. It went to the sanctuary for the expenses of the festival meals. Parts of animals offered in sacrifice also went to the priests. There was a third tithe payable at the end of every three years, Deut. 14:28, 29. The priests also had by way of support and among other things the first-born of men and animals and first fruits. These were sacred to God, and his right in them, so far as they constituted a pecuniary resource, was transferred to the priests.

11. Levitical Cities. In addition to the above support forty-eight cities were assigned to the tribe of Levi, inclusive of priests and Levites. Of these, thirteen were afterwards assigned to the priests, and six, three on either side of the Jordan, were set apart as cities of refuge. (See Topographical Geography.) A tract of land around the city went with each city. The property within the cities was the inalienable right of the Levites.

12. The Prophets. Among the sacred and theocratic persons of the Israelites were the prophets. The prophetical institution was one for which the law made provision. See Deut. 18:9–19. The historical origin of prophecy is cotemporaneous with the constitution of the Theocracy at Sinai. True prophecy existed before this, existed with the first promise of redemption immediately after the fall of our first parents. But

[13]

the Law, the Theocracy, the ceremonials of worship were instituted for the development of that promise through the prophetic office. Three or four different titles are applied to the prophets. These set forth the twofold office of the prophet, viz. the proclaiming of God's will as it is revealed to them, and the predicting of future events. The prophets were the divinely called and commisioned representatives of Jehovah to announce and interpret the divine will to others as that will was revealed to them of God. Prophets and prophecy existed therefore before Samuel, but Samuel as the great religious reformer and organizer of his day, was also the organizer of the more formal institution of the prophetic order, and founder of the so-called school of the prophets. But it should be remembered that there might be members of the prophetic order to whom the gift of prophecy was not vouchsafed, and that there might be inspired prophets who did not belong to the prophetic order, as Amos. The prophet inspired and announcing God's will, like the sixteen prophets whose Books we have, was sovereignly called of God to his office, generally, without special reference to lineal or scholarly antecedents. The prophets were the national poets; they were annalists and historians; they were preachers of a patriotism founded on religion; they were preachers of morals and a spiritual religion; they were extraordinary, but authorized exponents of the law; they held a pastoral office in relation to the people; they were political advisers, leaders and powers in the State; above all they were the revealers of God's will to men. The Scriptures do not represent an unbroken series of prophets each inducted into the office by his predecessor.

13. The Nazarites. Nazarite is the name given to such Israelites, whether male or female, as consecrated themselves to Jehovah by a peculiar vow prescribed in Num. Ch. 6. The special vow whereby one bound himself to be a Nazarite involved three things. First, he was to abstain from wine and strong drink, vinegar made of wine or strong drink, liquor of grapes, grapes either moist or dried, in fact from every production of the vine. Second, he must refrain from cutting the hair of his head during the whole period of his Nazariteship. Third, he must avoid every contact with the dead during his Nazariteship. The Bible says nothing about the duration of the Nazarite's vow, but evidently leaves every one to fix his own time. When the time of Nazariteship was accomplished, the Nazarite had to present himself at the sanctuary with three sacrifices, corresponding to the three prohibitions of Nazaritism, viz. a he-lamb for a burnt offering, a ewe-lamb for a sin offering, and a ram for a peace offering. The idea of the Nazarite yow is a person separated, dedicated, for the time being, in a special sense unto Jehovah.

14. The Rechabites. They were a tribe or religious order who appear only in one memorable scene of Scripture, Jer. 35:2–18. Their history before and after it lies in much obscurity. In some respects they are analogous to the Nazarites with whom they shared the rule of abstinence from wine. But the Rechabites also were prohibited the building of houses (they dwelt in tents), and the cultivation of land. Their "father" or founder, to whom they referred their rule of life, was that Jehonadab or Jonadab, son of Rechab, who lent his countenance to Jehu in the abolition of Tyrian Baal-worship. 2 Ki. Ch. 10. The order or "house of

188 OLD TESTAMENT ARCHÆOLOGY.

Rechab" appears in Jer. Ch. 35, from which we learn that they had survived in Judah after the fall of the northern kingdom and continued to observe the ordinance of Jehonadab till the approach of Nebuchadnezzar drove them for protection into Jerusalem. Jeremiah promised them as a reward of their obedience that they should never lack a man to represent them (as a priest) before Jehovah.

15. The Judges. See § 28, 7.

XXXIV.-Sacred Usages. (Sacrifices, Offerings, Vows, etc.)

1. Classes of Sacrifices or Offerings. The sacrifices prescribed to Israel were animal and vegetable, or bloody and unbloody. The animal or bloody sacrifices were the more important. The vegetable or unbloody were generally offered as accompaniments of the animal or bloody. In regard to both kinds, only such animals and vegetables were required and offered as were most common with the people, and as a rule, most useful or valuable to the people. It was absolutely necessary that whatever was offered in sacrifices should be the best, without blemish, and if the offering was an animal, that it be at least eight days old. Besides cattle, sheep and goats, of both sexes, pigeons, and turtle doves were also offered, and in case of great necessity, poverty, etc., the birds might be substituted for animals.

2. The Vegetable Offerings. These consisted of roasted ears or heads of grain, fine flour, oil, wine and frankincense. Besides the regular meal and drink offering, they included the first sheaf at the passover, the shew bread and the pentecostal loaves. In all cases the best of each kind was to be offered. Leaven and honey were excluded as offerings. The leavened pentecostal loaves and wave cakes were not brought upon the altar.

3. The Presentation of Animal Sacrifices. The ceremony required that the following be done:

a. The presentation of the victim.

b. The laying on of hands by the offerer.

c. The slaying of the victim.

d. The sprinkling of the blood of the victim.

e. The burning of some part of the animal on the altar.

In nearly all animal sacrifices the laying on of hands by some person or persons was required. The act implied substitution, and set forth symbolically the transference of the sin, desire, purpose, etc. of the individual to the victim. The waving (horizontally) or heaving (elevating and lowering perpendicularly) of an offering had a similar meaning. In public sacrifices, and in those for a leper, the animal was slain by the priests, but in private sacrifices it was slain by the offerer, except in the case of birds. The victim's life was taken to secure its blood, and that because of Lev. The consuming of the victim by fire had no 17:11. reference to the appeasing of God's anger, but was simply a method of bringing it before and making it acceptable to God. All sacrifices were offered either on the ground of communion with God, or for the purpose of restoring such communion. The burnt and peace offerings indicated communion with God. Sin and trespass offerings were made when communion with God had broken off, and to restore it.

4. The Burnt Offering. The burnt offering was one of the most common of sacrifices. It implied atonement and symbolized entire surrender. The victim must be an unblemished male animal—bullock, ram or goat—or in case of poverty, turtle doves or the young of tame doves, either gender.

5. The Peace Offering. In the peace or thank offering only the choicest part of the animal came upon the altar and was for God, *viz*. the fat; the remainder of the animal being divided between the priests and the offerer. The principal thing about the peace or thank offering was the accompanying sacred meal where God was regarded as the guest of the individual or community. There were two classes of peace or thank offering, *viz*. those legally binding and those purely voluntary.

6. The Sin Offering. Atonement is the fundamental idea both in the sin offering and the trespass or guilt offering. As to the difference between these two kinds of offering, the one carries the idea of satisfaction and restitution, the other the idea of explation; the one for the most part concerns the offence, the other the offender. The making of amends must go with the trespass offering, while the sin offering sufficed of itself. The trespass offering was of an individual, the sin offering of a public character-for a people. The sin offering was brought on all the great festival seasons, and in connection with other sacrifices; the trespass offering was brought only by itself (except in the case of cleansing a leper), and never upon festival occasions. As to the offences requiring a sin offering and the character of the offering see especially Lev. Ch. 4 and Ch. 5 to verse 14.

7. The Trespass Offering. The prominent idea again is atonement. Some of the differences between this and the sin offering are noted under Sin Offering just above. Both the sin and trespass offering were "most holy"—see what follows under 8. For the trespass offering it was a ram or a he-lamb that was always required. The trespass offering was to be made for the following:

a. If the person sinned unwittingly in the "holy things." Lev. 5:15, 16.

b. Unintentional transgression of some divine command. Lev. 5:17-19.

c. Oppressing or falsely dealing with a neighbor. Lev. 6:2-7.

d. Criminal intercourse of a man with a betrothed maid. Lev. 19:20-22.

e. In the ceremony for purifying a leper. Lev. Ch. 14.

f. In case of the defilement of a Nazarite. Num. 6:6-12.

g. In the case of the men who had married foreign wives, as that case is summed up in Ezra 10:19.

8. "Holy" and "Most Holy" Offerings. Certain offerings like the burnt offering, sin offering, trespass offering, and the lambs presented at Pentecost for a public peace offering, were regarded and called "most holy," while others, like the remaining public peace offerings were regarded simply as "holy." The "most holy" offerings were slain on the north side of the altar, while the "holy" offerings were slain on the south side of the altar. In the case of the "most holy" offering such part of it as did not come upon the altar was eaten exclusively by the priests in the forecourt of the sanctuary, while in the case of the "holy" offering the offerers also partook.

9. The Meal Offerings. Certain meal offerings were independent, i. e. constituted offerings of themselves and were brought alone to the altar, while others were brought in connection with and as the accompaniments of other offerings. To the former belonged

a. The raw wheat flour mixed with oil and frankincense mentioned in Lev. 2:1-3.

b. The oblation consisting of oven-baked unleavened cakes and wafers mixed with oil in Lev. 2:4.

c. Similar cakes baked in a pan and broken. Lev. 2:5, 6.

d. A meal offering of the frying pan. Lev. 2:7.

e. The meal offering of first fruits mentioned in Lev. 2:14–16.

f. The meal offering of jealousy described in Num. Ch. 5.

g. The sin offering in cases of extreme poverty. Lev. 5:11-13.

h. The offering of the high priest at his consecration, and daily afterwards. Lev. 6:19-23.

i. The meal offering required in the ceremony for the purification of a leper. Lev. 14:10, 20.

Offerings a, b, c, d, e, f and g, were partly consumed on the altar, the rest being the portion of the priests. Offerings h and i were entirely consumed upon the altar. Offerings a, b, c, d, e and f, were private and voluntary, but offering g was required by law as also h and i. There were besides meal offerings brought in connection with other offerings, viz. with the daily morning and evening sacrifices; with the additional daily festival sacrifices including the Sabbath; with

192

the burnt offering brought on the presentation of first fruits at the passover and at pentecost; with the burnt and sin offerings offered for the congregation when it had sinned unwittingly; and with those of the Nazarite when he had completed his vow. As to what was offered and the proportion see Num. 15:1-12.

10. The Daily Sacrifices. They were in order as follows:

a. A burnt offering of a lamb with its meal offering.

b. The meal offering of the high priest. See No. 9.

c. The offering of incense at the altar of incense.

d. The drink offering for the previous meal offering.

e. On the Sabbath two lambs were offered as burnt offerings, with the appointed meal and drink offering. Lev. 28:9, 10.

11. Ceremonial Purifications. Three kinds of ceremonial impurities required animal sacrifices as a means for their removal; *viz.*:

a. Contact with the dead of men or animals. For the law and ceremony of purification see Num. 19: 1-22.

b. Leprosy in men, houses or clothing. For the law in regard to this see Lev. Chs. 13 and 14.

c. Morbid fluxes of the human body. For the law in regard to this see Lev. Ch. 15.

12. Vows. The Scriptures nowhere require them, only recognize and regulate them. They are of two kinds, *viz.*:

a. Positive Vows, in which some designated object or person was dedicated to Jehovah, as in the case of Jacob's vow at Bethel. Gen. 28:20-22.

c. Negative Vows, in which the person abstained from certain privileges or enjoyments for the purpose of doing honor to Jehovah, as in the case of the Nazarite vow.

13. The Nazarite and Rechabite. See preceding section.

14. Circumcision. The Jews, through Abraham, received the rite of circumcision from Jehovah; Moses established it as a national ordinance; and Joshua carried it into effect before the Israelites entered the land of Canaan. Circumcision was the sign of the covenant entered into between God and Abraham and his seed. Gen. 17:10, 11. The rite of circumcision was performed on male children on the eighth day after birth. The rite extended to servants. Neglect to observe the rite entailed the penalty of being cut off from the people.

XXXV.-Idolatrous Forms.

The principal forms of idolatry mentioned in the Old Testament are as follows:

1. The Asherah. The word Asherah is wrongly rendered "groves" in the Authorized Version. In the Revised Version it is simply transliterated. This form of idolatry is probably closely related to the obelisk worship of the Ancient Egyptians. The name is still preserved in Arabic and is applied to a ceremony observed in connection with the celebration of the birth of the prophet Muhammad, that seems to have come down from the obelisk worship of Old Egypt. Deut. 16:21.

2. Ashtoreth, plural Ashtaroth. Was the female counterpart of Baal, which see. This goddess is the same as Ishtar of the Assyrian pantheon, and as Astarte of the Greeks and Romans.

194

3. Baal. This deity represented the powers of nature, especially the sun. The chief gods of the Phoenicians and Canaanites were Baal and Ashtoreth, his female counterpart. Under other names he was worshipped also by other nations of antiquity. Thus Molech the national divinity of the Ammorites, and Chemosh, the abomination of the Moabites, simply stood for Baal. The same is true of the old Egyptian Amon Ra, etc. Baal's images were often made in the human form. He had absolute authority, had his priests and prophets; while altars were erected and sacrifices offered to him. The first mention of this form of idolatry in Israel is in Num. 25:3; Deut. 4:3. Baal-worship was one of the grossest forms of idolatry into which Israel fell.

4. The Brazen Serpent. This was one of the milder forms of idolatry into which Israel fell. In what this idolatry consisted will be learned from reading together Num 21:9 and 2 Ki. 18:4.

5. *Chemosh.* Was the national god of the Moabites, and is identified in general with Baal and Molech. See Baal above. The worship of Chemosh was accompanied by the most cruel and licentious rites, as was also that of Baal and Ashtoreth.

6. Dagon. Dagon was the national god of the Philistines. The idol had the hands and face of a man and the body of a fish. Judg. 16:23. Dagon's female counterpart was Atargatis, mentioned in the Apocrypha.

7. The Golden Calf. Upon two notable occasions the Israelites fell into this form of idolatry, the one being at Sinai, the other the calf worship instituted by Jeroboam at Dan and Bethel. This form of idolatry is most probably of Egyptian origin, going back to the worship of the sacred bull Apis at Memphis, and Mnevis at Heliopolis. Besides other reasons this view seems to be confirmed by the statements made in Josh. 24:14; Ezek. 20:8; 23:3, 8.

8. The High Places. At first this term referred to hill-tops which were favorite places for offering sacrifices; but afterwards it came to be applied to worship at forbidden places instead of that required at the sanctuary.

9. *Molech*. Molech was the national divinity of the Ammonites, corresponding to Baal. See Baal and Chemosh above.

10. Nebo. This divinity is mentioned in Isa. 46:1 in connection with Bel or Baal. Nebo was the fifth in the list of planetary divinities in the Assyrian and Babylonian pantheon, and corresponded to Hermes of the Greek, and Mercury of the Roman mythology.

11. Chiun, Remphan, Rephan. The God Chiun of Amos 5:26 is doubtless the same as Remphan of The Acts 7:43. This idol was honored by the Israelites during their sojourn in the wilderness. As Assyrian and Babylonian monuments show the refererence is to the planteary divinity Saturn.

12. *Rimmon*. Mentioned only in connection with Naaman's request of Elisha in 2 Ki. 5:18. Rimmon was a Syrian divinity to whom a temple was erected in Damascus.

13. Tammuz. Mentioned only in Ezek. 8:14. Probably the name of an Assyrian and Babylonian deity of Akkadian origin, the Assyrian name being Dumuzi.

13. The Teraphim. The first form of idolatrous worship of which the Bible gives us any information, and

196

the last form of idolatrous worship in which the Israelites fell after their return from the Babylonian exile, was that connected with the Teraphim. From the notices we have of them they seem to have been simply household gods like the Roman penates; images having the form of a man. Gen. 31:19; Zech. 10:2.

15. Divination. The forms of and laws against divination are for the most part set forth in Lev. 19: 26, 31; 20:6, 27 and Deut. 18:9-14. Several terms are used in these passages. "Divination" is a generic term that covers all others. The fundamental idea in it is, to decide. "Augury" carries the idea of acting covertly, hence to use magic, conjure. The "enchanter" was one who used the arts of divination professionally. The word *serpent* comes from the same root which has the primary idea of hissing. The term "sorcerer" is one of the terms applied to the magicians of Pharaoh who sought to imitate Moses. The "charmer" was one who bound knots or charms. The "consulter with a familiar spirit" was the form of magic practiced by the so-called "witch of Endor"; *i. e.* one who inquired of an ob or python. The "wizard" was the "knower" or wise man, one who could foretell the future. The "necromancer" was one who was supposed to be able to commune with the spirits of the deceased, and so learn the secrets hidden from the living. Other forms of divination are mentioned in Ezek. 21:21; Hos. 4:12, etc.

XXXVI.-Jewish Sects.

1. Samaritanism. The name is derived from the city of Samaria, the capital of the district inhabited

by the Samaritans. Samaritanism was the only sect originated before the exile. It had a political rather than religious cause. With the fall of the Northern Kingdom of Israel many Israelites were carried away captive to Babylon, but some were allowed to remain. In place of the Israelites transported to Babylon the King of Assvria brought heathen colonists from Babylon and other places and located them in the cities of Samaria, 2 Ki. 17:24. These colonists represented nine different nationalties. As a religious outgrowth of the political amalgamation of these colonists with the Israelites remaining in the land we have the sect of the Samaritans. Samaritanism accepts the Pentateuch as its religious Book; is strictly monotheistic; teaches a resurrection of the dead, a day of judgment, and everlasting rewards and punishments; observes the seven national festivals of the Jews; and holds to the coming of the Messiah 6,000 years, and the coming of the last judgment 7,000 years after the creation. The square letter in use for the Hebrew since the second century B. C. the Samaritans have never adopted. They employ one of their own which closely resembles the Phœnician. The Samaritan Pentateuch is the Pentateuch according to the present Hebrew text, but in the Samaritan character.

2. The Scribes. Before the exile the priests and prophets were dominant. After the exile and in place of the prophet arose the Scribe. At first the Scribe was nearly identical with the priest. In Ezra both offices were united. But later the Scribe took the place of the prophet, and became an antagonist of the priest. Out of the party of the Scribes came the party of the Pharisees, and out of the party of the Priests came

the party of the Sadducees. The Scribes aimed to champion the Mosaic law; but the explanation and traditions of their unwritten law upon the law of Moses soon subverted the latter.

3. *The Pharisees.* The Pharisees formed the party of the law, as that law was interpreted and applied by the Scribes. See The Scribes above.

4. The Sadducees. They have been called the aristocracy of Israel, who put social position above conformity to the oral law. They constituted the party of opposition to the Pharisees. The Pharisees were best represented by the Scribes, and the Sadducees were best represented by the priesthood.

5. The Essenes. This sect or order arose during the Maccabaen period. They differed greatly from Pharisee and Sadducee, but of the two more nearly resembled the former. They observed the Sabbath, but rejected the sacrifices. They laid special emphasis on the freedom of the individual and on speaking the truth.

IV.-LITERATURE, SCIENCE AND ARTS.

XXXVII.—Literature, Science, and Arts of the Jews.

This subject is treated of in part under Biblical Philology, and under Domestic and Civil Antiquities.

For the Alphabet, Alphabetical Writing and Literature of the Jews see also the Author's Introduction Outlines of the Books of The Old Testament.

The statements made in Gen. 46:3 and The Acts

7:22 and other similar statements imply that in Egypt Israel was to be made a great nation not only numerically but intellectually. Sufficient evidence has already been furnished to show that the Israelites, Egyptians and others were far more thoroughly versed in the sciences and arts than is commonly supposed; that certain so-called discoveries of the last half century were well-known matters one and two thousand years B. C.

Only the briefest statement of a few facts can be made under each of the following heads.

1. Astronomy. Psa. 19:6 teaches an orbital revolution of the sun from one end of heaven (in Argo) to the other end (in Hercules), a fact that is represented as one of the recent discoveries of modern science. Another of these so-called recent discoveries is the revolution of our whole solar system around the Pleiades, or more specifically around Alcyone of the Pleiades, a fact plainly taught in Job 38:31. And in the same verse in Job there follows another challenge of God to Job "Canst thou loose the bands of Orion?" where the evident reference is to that unique fact about the stars composing Orion's belt that they preserve the same relative position to each other and to the rest of the constellation ever and without change. The idea of Orion being a giant chained to the skies is a comparatively modern myth. Again in the following verse, Job 38:32 we read "Canst thou bring forth Mazzaroth in his season?" Most interpreters change the letters in the orignal word, m into n and r into land then refer it to the signs of the Zodiac. There is no need of taking such liberties with the text, and the Arabic shows plainly what is meant, as the word is an

Arabic one. The term refers to the satellites as they move about their planets, held to the planets by the law of gravitation; to the planets and their satellites as they move about the sun, held by it and to it according to the same law of gravitation; to the sun and planets and the satellites and the whole solar system moving about Alcyone of the Pleiades, held by it and to it according to the same wonderful law. Did Job understand all this? Doubtless; or God would be guilty of challenging Job in language Job could not understand; would be guilty himself of the charge he makes against Job and his persecutors of "darkening counsel by words without knowledge." Venus is referred to in Isa. 14:12 and Saturn in Amos 5:26. Other stars and constellations are referred to. The phases of the moon are carefully noted. When the Old Testament speaks of stars singing it is not fancy but ascertained fact as their vibrations of light do emit harmoniously musical sounds. The above will suffice by way of example.

2. Geology—The Structure of the Earth. If the language of Job 38:4-11 and Proverbs 8:23-29 be critically studied it will be found to set forth in a remarkable manner the geological order in the formation of the earth. The passages Psa. 103:12; Isa. 40:22 and others plainly teach or imply the spherical character of the earth. Various meteorological facts, laws and conditions are repeatedly alluded to in such a manner as to show a wide and accurate scientific knowledge of the same. Indirect statements, and in statements used by way of illustration, numerous natural laws and phenomena are cited, and each [14]

201

202 OLD TESTAMENT ARCHÆOLOGY.

citation will be found to be without an error if the language be thoroughly studied.

3. Numerical Computation. Probably men first began to compute by using the fingers of the hand. At an early time five as a multiple was very common. There are special words for the units, and for 10, 100, 1,000 and 10,000. All other numbers are indicated by the duals or plurals of these. The letters of the Hebrew alphabet were also used as signs of numbers. Hebrew usage shows a decided preference for whole numbers as against fractions, and likewise for round numbers. Numbers are also used in the Bible in a representative capacity, when precision is not the intention; thus seven and its multiples indicate com-Numbers are also used in a symbolical pleteness. sense; thus three and four as well as their sum and multiple have a typical or mystical meaning.

4. Divisions of Time. At an early period time was measured during the day by shadows, during the night by the position of the constellations. The dial was apparently no new thing in the reign of Ahaz, 740 B. C. But long before this date, as far back as the fifth dynasty, B. C. 3566–3333, the old Egyptians divided both day and night into twelve parts. During the period of the Judges, and probably before that, the night was divided into three "watches" of four hours each. The three principal parts of the day were morning, midday and evening. The Hebrew word for hour, and with which the modern Arabic word for hour corresponds, is first used in Daniel (3:6), and in that Book is used five times. It was not used with the same precision as at present. The Jews divided the day into four parts; the third hour was 9 A. M., the

sixth hour was 1? M. and the ninth hour 3 P. M. But the Jews were accustomed to begin the day with the evening. The division of time known as the *week*, or seven days, goes back to the beginning of human Gen. 2:2, 3; 7:4; 29:27. While the history. Hebrew months were lunar they were also acquainted with the solar month. Before the exile the months were for the most part numbered, but names are given to four, viz., Abib, Ziv, Bul, Ethanim. After the exile names of Assyrian or Babylonian origin were given to the months, the names and order of the months of the year being as follows:-Nisan (formerly Abib) corresponds approximately to our April; Iyar (formerly Ziv) = May; Sivan = June; Tammuz = July; Ab = August; Elul = September; Tishri (formerly Ethanim) == October; Marcheshvan (formerly Bul) == November; Chisley = December; Tebeth = January; Shebat = February; Adar = March. To adjust the calender to the course of the sun it was customary about every third year to add a thirteenth month called Veadar, *i. e.* another Adar. The Mosaic law began the year with Abib or Nisan. Another reckoning ended and began the year with Tishri. The Sabbatic and Jubilee years began with Tishri. The celebration of Tishri first as New Year's day was introduced after the exile. The first era from which the Hebrews reckoned time was the Exodus: after that from the accession of certain kings; after the exile the Seleucidian era beginning B. C. 312 was adopted: and about the twelfth century A. D. the present practice was adopted, *i.e.* reckoning from the "creation of the world," and according to which in order to ascertain the Jewish year we must add 3761 to the

year of our era. For the seasons of the year see § 15, 2, and Sacred Seasons § 31.

5. Medicine and Surgery. The Hebrews doubtless acquired much of medical knowledge and skill from the ancient Egyptians who were far advanced in this profession as we learn from their monuments, from profane writers and from such Scripture allusions as Jer. 46:11. When such delicate operations as those necessary for the removal of cataract from the eye were successfully performed in Egypt about 2000 B. C. the medical art can scarcely be said to have been in its infancy then or when the Israelites were in Egypt. The old Egyptian physicians were required to be specialists, so that there were oculists, dentists, physicians for disorders of the bowels, diseases of the head, They were also required to go through a thorough etc. course of study and training before being allowed to practice, and then to practice only their specialty. They also held post-mortem examinations to ascertain the cause, nature of disease, etc. Doubtless the Israelites acquired much from the Egyptians as to the medical art. Diseases were carefully and scientifically diagnosed. Remedies still in use were applied. Contagion was thoroughly understood and there was a perfect system of quarantine enforced by law. Those passages in the Old Testament that speak about the "reins," e. q. Psa. 26:2, necessarily imply quite a thorough understanding of the functions and operations of the kidneys. The Hebrew word as first used, refers to the kidneys, but afterwards when it comes to to be used of a moral organ or function, it can only be referred to the conscience. The Hebrew medical and sanitary laws looked however far more to the prevention of disease than to the cure of it. The description of old age given in Eccles. 12:1-7 is remarkable not only for its 'poetic beauty, but for its physiological accuracy. See further § 27.

6. The Art of Writing, Material for Writing, Literature, etc.

On the Alphabet and Alphabetical Writing see Author's Introduction Outlines.

On the Original Languages of the Old Testament see Author's Introduction Outlines.

On the Hebrew Language and Literature see Author's Introduction Outlines.

As the Alphabet and alphabetical writing came from Egypt so likewise the first materials for writing came from Egypt. There the Israelites learned the art of writing and from there obtained the requisites necessary for the practice of the art. Both metallic and reed pens were used, the former being used also for engraving on wood and metal. The inkhorn, carrying the ink, pens and paper knife, was worn in the girdle. The first, and for many centuries the principal if not the only writing material was the celebrated papyrus paper grown, manufactured, and brought to perfection especially in Egypt. The papyrus was a water plant (see Bulrush \$ 16, 2), reed or can growing to the height of twelve or fifteen feet and having a tuft at its head. Anciently the plant was used for almost as many purposes as at present is the palm. The central pith of the plant was used for the manufacture of paper. This pith was cut lengthwise in strips; these strips were then laid aside of each other forming a layer; then another layer was formed on top of this one with the strips placed at right angles to the former ones, and so on, a preparation being added, after which the whole was crushed down, made properly thin, smooth, thus forming the sheet or leaves. The leaves were then glued together forming the papyrus rolls. As early as the sixteenth century B. C., and before, the pages of papyrus books were numbered at the top of the page over the middle of the text, while in the text were to be found crosses or asterisks to denote the proper place in the text for notes or additions. Writing was with black ink, was horizontal and perpendicular, and in the former case generally from right to left. Sentences, sections and chapters often began with red ink whence From *papyrus* comes our word our word *rubric*. paper; from its Greek name comes our word Bible; from its Roman name come our words chart and card: and from the gluing together of the papyrus leaves comes our word protocol. Other writing materials were skins of animals, leather, parchment, etc.

In addition to what is said in the Author's Introduction Outlines of the Books of the Old Testament on Hebrew Language and Literature a word may be added as to Hebrew poetry. Hebrew poetry is for the most part either lyric or gnomic, *i. e.* didactic, *e. g.* Proverbs and Ecclesiastes. Strictly speaking rhyme and metre do not belong to Hebrew poetry. Hebrew poetry is broken up into lines and strophes, the latter being composed of several of the former. The most remarkable thing perhaps about Hebrew poetry is what is called parallelism, which consists in recalling, in some way, in a second or third member, one or both, the thought expressed in the first, with some additional idea, before passing on to an entirely new one. Other features of Hebrew poetry are assonance, alliteration, acrostic arrangements and a certain rhythmical movement.

7. Music-Vocal and Instrumental. Both vocal and instrumental music was highly esteemed and cultivated in Old Testament times. The celebration of victories, the shepherds as they watched their flocks, the observance of the feasts, the worship of God, etc. were attended by music and song. Under David 4,000 Levites praised the Lord with music and song in the temple service, 1 Chron. 15:16-29; 23:5, 6. This great chorus of voices was led by 280 trained musicians, 1 Chron. 25: This body of 280 formed the orchestra of the 1 - 9. temple. They used stringed instruments like the psaltery and harp while the leaders under them used cymbals. Both men and women were in the choir. The orchestra took its place east of the altar of burnt offering. David employed men and women singers at his court. The music was cultivated, at times antiphonal, and of various airs. The singing was in unison. There was also solo-singing as well as chorus-singing. Some of the superscriptions to the Psalms indicate the instrument to be used, and others the air to be followed. The words "To the chief musician" refers to the leader who was to take the musical work as it was composed, and see that it was sufficiently practiced and properly executed for use in the temple. Musical instruments were of three kinds:-Stringed, wind, and instruments to be beaten or shaken. The principal stringed instruments were the harp and psaltery. The harp resembled the modern harp though it was probably of different forms, and somewhat smaller. It is seen portraved on the ancient Egyptian monuments, as e. q. at Saccarah in an inscription belonging to the fifth dynasty (B. C. 3566-3333). The psaltery probably resembled somewhat the modern guitar, and is also represented on the ancient monuments. The sabbeka translated "sackbut" and found only in Dan. Ch. 3, is probably not a wind instrument (sackbut), but a stringed instrument intermediate between the guitar and harp as represented on the Egyptian monuments. The Hebrew haleel translated "pipe," 1 Sam. 10:5, was a wind instrument resembling the flute, pierced with holes. Another wind instrument the ugab, Gen. 4:21, and translated "organ" and "pipe" resembled the *haleel* or flute, only that it was blown into from one end, and consisted generally of two hollow reeds, perforated along one side. This instrument was perhaps identical with another which gives its name to the Hebrew Mizmor = Psalm. The trumpets were of two kinds; the one consisting of the horn of some animal, blown in blasts or a prolonged note, for purposes of giving signal, etc., and only occasionally as an accompaniment to other musical instruments. The other was the silver trumpet of the priest, Num. 10:1-10. In Solomon's temple there were 120 silver trumpets used in the religious service. Of instruments to be shaken or beaten there was the *timbrel* resembling the modern tambourine, the castanets or small metallic discs, two attached to two of the fingers of each hand, and struck together; and the *cymbals*, similar to the castanets only much larger, with one held in each hand and struck together.

8. *Metals and Metallurgy*. Among the metals mentioned in the Old Testament are gold, silver, tin, lead, iron, copper, brass which is an alloy of copper and zinc, and bronze, an alloy of copper and tin with a little zinc added. Steel was also probably known. Iron and copper were mined in Palestine, but gold, silver, tin and lead were not natives. Mining methods similar to our own were employed as early as Job 28:1–11. The various processes of smelting, separating metals from their alloys, etc., were well understood before 3000 B. C. We read of those who were skilled in metallurgy before the flood, Gen. 4:22, and of numerous articles useful and ornamental, produced.

9. Precious Stones, Engravers, Sculpture, etc. Precious stones were an essential and highly prized ornament of kings, high priests and distinguished persons especially. They came chiefly from Arabia, to some extent from India and Ethiopia, and both by overland and maratime traffic. The following are the principal precious stones mentioned in the Old Testament with their Hebrew names.

a. Odem. Ex. 28:17. The term means a red stone. It is is translated "sardius," and is the *carnelian*. In Aaron's breastplate.

b. Pitdah. Ex. 28:17. And mentioned in Job 28:19 as coming from Ethiopia. The *topaz* of the ancients, but probably the modern chrysolite. The second stone in Aaron's breastplate. Ezek. 28:13.

c. Bareketh. Ex. 28:17. Translated "carbuncle," for which there is no good reason. Many prefer the rendering *emerald*. From the meaning of the root word, to glitter, to gleam, to gleam like the lightning, the reference would seem to be to the diamond. Third stone in Aaron's breastplate.

d. Nophek. Ex. 28:18. Translated "emerald," but it is probably the *carbuncle*, *i. e*, the garnet cut with a convex face. Ezek. 27:16. Fourth stone in Aaron's breastplate.

e. Saphir. Ex. 28:18; Ezek. 28:13. The sapphire. Fifth stone in Aaron's breastplate.

f. Yahalom. Ex. 28:18; Ezek. 28:13. Translated "diamonds," but is probably a sardonyx or a variety of chalcedony. Sixth stone in Aaron's breastplate.

g. Leshem. Ex. 28:19. Translated "ligure." A jacinth or amber. Seventh stone in Aaron's breastplate.

h. Shebo. Ex. 28:19. An agate. Eighth stone in Aaron's breastplate.

i. Ahlamah. Ex. 28:19. The *amethyst.* Ninth stone in Aaron's breastplate.

j. Tarshish. Ex. 28:20. Song of Songs 5:4. Translated "beryl," but probably the *topaz*. Tenth stone in Aaron's breastplate.

k. Shoham. Ex. 28:20. Job 28:16. Probably the beryl. In Aaron's breastplate the eleventh stone.

l. Yashfah. Ex. 28:20; Ezek. 28:13. The jasper. Twelfth stone in Aaron's breastplate.

m. Kadkod. Ezek. 27:15; Isa. 54:12. The ruby.

n. Ekdah. Isa. 54:12. The carbuncle or garnet.

o. Shameer. Jer. 17:1; Ezek. 3:9. Translated "diamond" and "adamant stone." The term indicates intense hardness.

From direct statements in the Scriptures, and from their long contact with the Egyptians, who were masters in the art, we know that the Israelites were skilled in engraving, sculpturing, etc. See Isa. 44:12, 13.

10. Other Arts. Among other arts practiced by the Jews and mentioned in the Scriptures are the mechanic arts, stone masons and plasterers, brick and tile

makers, apothecaries, perfumers, bakers, tanners, fullers, spinners, weavers, potters, etc. While certain arts and trades were looked upon with more favor than others, still skilled labor of any kind was always regarded honorably. As a rule artisans grouped together in cities, so that a particular part of a street or city would be given up entirely to a certain art or trade.

LITERATURE

AND

AUTHORITIES CONSULTED.

(PARTIAL LIST.)

By-paths of Bible Knowledge. Series. Weidner's Exegetical Theology. Schaff's Theological Propædeutic. Conder's Handbook to the Bible. Tristram's Natural History of the Bible. Works and Maps of the Palestine Exploration Survey. Smith's Bible Dictionary. McClintock and Strong's Cyclopædia. Encyclopædia Britannica. Van Lannep's Bible Lands. Dr. William Smith's Atlas of Ancient Geography, Journal of Royal Geographical Society. Lane's Arabic-English Lexicon. Bistani's Arabic Lexicon. Wilkinson's Ancient Egyptians. Bissell's Biblical Antiquities. Conder's Tell Amarna Tablets. Dr. Morrow's Dermatology. Dr. N. Williamson. Dr. Green's Hebrew Feasts. Edersheim's The Temple. Maspero's Egyptian Archaeology. Dr. G. A. Smith's Historical Geography of the Holy Land. Stanley's Sinai and Palestine. Petrie's Tell el Hesy (Lachish).

Schumacher's Northern Ajlun. Publications of the Egyptian Exploration Fund. Conder's Ordnance Survey of Sinai. Palmer's Desert of the Exodus. Temkin's Life and Times of Abraham. Tristram's Land of Israel and Moab. Robinson's Researches in Palestine. Edersheim's History of Judah and Israel. Thomson's Land and the Book. Trumbull's Kadesh Barnea. Merrill's East of Jordan. Palmer's Ancient History from the Monuments. Jewish Artizan L1fe. Delitzsch. The Bible and Modern Discoveries by H. A. Harper. The Higher Criticism and the Monuments. Sayce. Records of the Past. Series. Transactions of the Society of Biblical Archaeology. The Religion of Ancient Egypt. Renouf. Biblical Archæology. J. Jacobs. Egypt under the Pharaohs. Brugsch. Commentaries. Other Works on the subject by Jahn, Rosenmueller, DeWette, Ewald, Scholz, Haneberg, Keil, Schegg, Keubel, Herzfeld, Ebers, Brown, Baur, Hengstenberg, Wellhausen, Merrill,

Porter, Botta, Lenormant, Tiele, Oppert, Burckhardt, Bur-

ton, Lane, etc.

	PAGE.
Section I. Definitions	. 3
Section II. Sources of Biblical Archæology	. 5
Section III. Material of Biblical Archæology	. 6
OLD TESTAMENT GEOGRAPHY.	
Section IV. Parts and Definitions	. 7
POLITICAL GEOGRAPHY OF PALESTINE.	
Section V. Definition	. 7
Section VI. Names	. 8
Section VII. Boundaries	. 8
1. Geographical Position	. 8
2. Natural Boundaries and Dimensions	
3. Politico-Historical Boundaries and Dimensions	. 9
Section VIII. Divisions (Territorial)	
1. Palestine before the Conquest	
2. Palestine after the Conquest	
3. Palestine under the Judges and Monarchy	. 16
4. Palestine during the Asmonæan Period	
Section IX. Inhabitants and Politico-Historical Divis	-
ions	
1. Primitive Inhabitants	
2. Inhabitants of Patriarchal Period	
3. Inhabitants after the Conquest	. 23
4. Inhabitants after the Captivity	. 34
Physical Geography of Palestine.	
Section X. Definition	. 25
Section XI. General Features	. 26
Section XII. Land Surface	. 28
1. Mountains	-
2. Plains and Deserts	
3. Valleys	. 32

Section XIII. Water Surface	- 33
Section XIV. Geology	36
Section XV. Meteorology	38
1. Temperature	39
2. Seasons	40
3. Rain	41
4. Winds	42
Section XVI. Botany	42
1. Trees and Shrubs.	45
2. Herbs and Flowers	53
Section XVII. Zoölogy	63
1. Mammals	63
2. Birds	76
3. Reptiles	84
4. Fish	86
5. Invertebrate and Articulated Animals	88
• TOPOGRAPHICAL GEOGRAPHY.	
Section XVIII. General Topography	93
Section XIX. Special Topography	110
OLD TESTAMENT ETHNOGRAPHY.	
Section XX. Parts and Definitions	113
Domestic Antiquities.	
Section XXI. The Dwelling	113
1. Kinds of Dwellings	114
2. Architecture of Dwellings	115
3. Furniture of Dwellings	117
4. The Caravansary	119
5. Cities	119
Section XXII. The Family	120
1. Names	120
2. Children	121
3. Marriage	121
4. Divorce	122
5. Concubinage	123
6. Social Status of Women	123
7. Social Intercourse	123
8. Servants:	124
9. Death and Burial	125

Section XXIII. The Meal	125
Section XXIV. The Clothing	128
1. Kinds	128
2. Materials	128
3. Colors	128
4. Men's Dress	129
5. Girdle, Head and Foot Dress	130
6. Women's Dress and Ornaments	130
7. The Hair	133
8. Pigments, Cosmetics, Perfumes	133
9. Apparel of Rank	134
Section XXV. The Principal Occupations	134
1. Sheep	134
2. The Shepherd	135
3. The Sheepfold	136
4. Goats	136
5. Cattle	137
6. The Horse	137
7. The Camel	137
8. The Mule and Ass	138
9. Agriculture	138
10. The Sabbatic Year	139
11. Grains	139
12. Seasons	139
13. Agricultural Implements	139
14. Agricultural Processes	139
15. The Fruit Harvests	140
16. Gardening	141
Section XXVI. The Commercial Life	141
1. Scriptural Standpoint	141
2. Trade Under the Kings	142
3. Transportation	143
4. The Monetary System	143
5. Measurements	145
Section XXVII. Diseases Mentioned	145
1. The Disease of Leprosy	146
2 Plague and Epidemic Diseases	149
3. Diseases of the Eye	151
4. Diseases of the Nervous System	152
5. Diseases of Individuals	152
[15]	

CIVIL ANTIQUITIES OF THE JEWS.

Section XXVIII. Forms of Government	153
1. Family	153
2. Patriarchal	153
3. Tribal	153
4. The Eldership	154
5. Representative	154
6. The Shoterim	154
7. The Judges	155
8. The Levites	155
9. Legislation before the Monarchy	155
10. The Kingdom	156
11. Inauguration	156
12. Succession	157
13. Functions and Privileges	157
14. Revenues and Disbursements	157
15. The Royal Court	158
16. The Disruption and Fall	158
17. After the Exile	159
Section XXIX. Judicial Courts and Processes	159
Section XXX. Military Affairs	164
SACRED ANTIQUITIES OF THE JEWS.	
Section XXXI. Sacred Seasons	167
1. The Hebrew Feasts	167
2. Classification.	168
3. Relation.	168
4. The Sabbath	169
5. The Passover.	169
6. Feast of Unleavened Bread	170
7. Feast of Weeks, or Pentecost	171
8. Feast of Tabernacles	172
9. The New Moon.	173
10. The Day of Atonement	174
11. Purim.	175
12. Feast of Dedication	175
Section XXXII. Sacred Places	176
1. The Tabernacle	176
2. Court of the Tabernacle	176
3. Altar of Burnt Offering.	177

4	The Laver	177
ð	. The Tabernacle Proper	177
6	. The Holy of Holies.	177
7		177
8	. The Ark	178
ę		178
10		178
11	. The Golden Candlestick	179
12		179
13		180
14	. The Synagogue.	180
Secti	on XXXIII. Sacred Persons	181
	. Israel—Levi—Aaron	181
2	. Consecration of the Levites	182
9		182
4		182
Ę	Consecration of Priests	182
6		183
7	. Divisions of Priests and Levites	183
8	Priestly Dress	184
ç		184
10		184
11	**	185
12		185
18		187
14		187
15		188
Secti	on XXXIV. Sacred Usages:-Sacrifices, etc	188
	. Classification	188
2	. Vegetable Offerings	188
8	. Presentation of Animal Sacrifices	189
4	. The Burnt Offering	190
Ę	. The Peace Offering	190
(5. The Sin Offering	190
1	. The Trespass Offering	191
8	B. Holy and Most Holy Offerings	191
	. The Meal Offerings.	192
1(0	193
1	Ceremonial Purifications	193

12.	Vows	193
13.	The Nazarite and Rechabite	194
14.	Circumcision	194
Section	n XXXV. Idolatrous Forms	194
1.	The Asherah	194
2.	Ashtoreth	194
3.	Baal.	195
4.	The Brazen Serpent	195
5.	Chemosh	195
6.	Dagon	195
7.	The Golden Calf	195
8.	The High Places	196
9.	Molech.	196
10.	Nebo	196
11.	Chiun, Remphan, Rephan	196
12.	Rimmon	196
13.	Tammuz	196
14.	The Teraphim	196
15.	Divination	197
Section	n XXXVI. Jewish Sects	197
1.	Samaritanism	197
2.	The Scribes	198
3.	The Pharisees	199
4.	The Sadducees	199
5.	The Essenes	199
	LITERATURE, SCIENCE AND ARTS.	
Sectio	n XXXVII. Literature, Science, Arts	199
1.	Astronomy	200
2.	Geology	201
3.	Numerical Computation	202
4.	Divisions of Time	202
	Medicine and Surgery	204
6.	Art of Writing, Material, etc	205
7.	Music	207
8.	Metals and Metallurgy	208
9.	Precious Stones, Engravers, etc	209
10.	Other Arts.	210
Litera	ture	213
		215

New Brunswick Seminary Publications

- 1. Analysis of Systematic Theology, by Prof. S. M. Woodbridge, D.D., LL.D.
- 2. Practical Catachetics, by Prof. D. D. Demarest, D.D., LL.D.
- 3. The Psalms, a new translation, by Prof. John De-Witt, D.D., LL.D., L.H.D. (Randolph & Co.)
- 4. History and Characteristics of the Reformed Church in America, by Prof. D. D. Demarest, D.D., I.I..D.
- 5. An Arabic Manual. The Elements of Arabic Grammar, by Prof. J. G. Lansing, D.D. (Chas. Seribner's Sons.)
- 6. The American Revised Version of the Book of Psalms, edited by Prof. J. G. Lansing, D.D. (Fords, Howard and Hulbert.)
- 7. The Sage Library, by Prof. J. C. Van Dyke, L.H.D.
- 8. The Historical Society, by Rev. W. Armitage Beardslee, A.M.
- 9. Dort and Westminster, by Prof. D. D. Demarest, D.D., LL.D.
- 10. Plan of the Theological Seminary.
- 11. Practical Liturgics, Part I. by Prof. D. D. Demarest, D.D., LL.D.
- 12. Practical Liturgics, Part II. by Prof. D. D. Demarest, D.D., LL.D.
- 13. Manual of Church History, by Prof. S. M. Woodbridge, D. D., LL. D.
- 14. Introduction Outlines of the Books of the Old Testament, by Prof. J. G. Lansing, D.D.
- Notes on the Constitution of the Reformed Church in America, by Prof. D. D. Demarest, D.D., LL.D.
- 16. Synopsis of Church Government, by Prof. S. M. Woodbridge, D.D., LL.D.
- 17. Outlines of the Archæology of the Old Testament, by Prof. J. G. Lansing, D.D.

.

.

25

.





